



ANNUAL REPORT OF THE  
STANDING COMMITTEE ON  
HUMAN RESOURCES

2005

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**House of Assembly  
Nova Scotia**

Hon. Murray Scott  
Speaker  
House of Assembly  
Province House  
Halifax, Nova Scotia

Dear Mr. Scott:

On behalf of the Standing Committee on Human Resources, I am pleased to submit the 2004 – 2005 Annual Report of the Committee for the First Session of the Fifty-Ninth General Assembly.

Respectfully submitted

Mr. Ron Chisholm, MLA  
(Guysborough – Sheet Harbour)  
Chairman  
Standing Committee on Human Resources

Halifax, Nova Scotia  
2005



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contains recycled fibre





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## Standing Committee on Human Resources Annual Report 2004 - 2005

**FOREWORD**

The report of the Standing Committee on Human Resources is written in accordance with the rules and procedures of the House of Assembly. First, outlining the role of the Committee in regard to approving or not approving applications to provincial Agencies, Boards and Commissions. Second, providing a brief summary of witness / topics that came before the Committee as assigned to within the committee's mandate.

**MANDATE : TERMS OF REFERENCE**

The Human Resources Committee has been legislated, since 1993, to look at appointments to Agencies, Boards and Commissions. The only appointments that the Committee will not consider are those excluded by rule 60 (2) (c) (iv) 5. (a-d) of the mandate contained within the *Province of Nova Scotia Rules and Forms of Procedure of the House of Assembly*.



*TERMS OF REFERENCE IN REVIEWING AGENCY, BOARD AND COMMISSION APPOINTMENTS:*

1. *Where Governor in Council approval is required for an appointment to an Agency, Board or Commission, after consideration by Executive Council of a person recommended for appointment to an Agency, Board or Commission, the Clerk of the Executive Council shall submit the name of the person to the Human Resources Committee, on form "A".*
2. *Prior to making a Ministerial appointment to an Agency, Board or Commission for which Governor in Council approval is not required, a Minister shall submit the name of the proposed appointee to the Executive Council for consideration. Where the Executive Council recommends the name, the Clerk of the Executive Council shall submit the name of the person to the Human Resources Committee.*
3. *Committee members shall review the name submitted for approval having regard to qualifications of the individual, affirmative action concerns and, where relevant, the regional representatives of the Agency, Board or Commission.*
4. *The purpose of the Committee review is not to replace the function of Government Departments and Ministers in making appointments. Its function is to approve or not approve the name before it, not to consider or recommend alternative names for appointments.*
5. *The following appointments shall not be submitted to the Human Resources Committee for review:*
  - (a) *appointments of provincial public or civil servants by virtue of their employment (i.e. The Deputy Minister of Finance is an unpaid member of the Lotteries Commission);*
  - (b) *candidates selected by an open competition and selection process or peer review (i.e. Provincial Judges selected by the Judicial Appointments Committee or employees of Agencies, Boards or Commissions);*
  - (c) *candidates recommended for appointment to self-regulatory bodies who are elected or recommended by the body (i.e. Nova Scotia Medical Society);*
  - (d) *candidates recommended for appointment to Hospitals and Universities where the candidate is recommended by the Board of Governors or Directors of the Institution.*
6. *The Committee may interview a recommended candidate where a majority of members support a motion to interview a particular recommended candidate.*

7. *The Committee shall not hear submissions or representations from anyone not a member of the Committee.*
8. *Meetings of the Committee shall be open to the public unless the Committee majority vote determines to meet in camera.*
9. *The Committee shall meet at least once a month every month of the year irrespective of whether the House of Assembly has been prorogued.*
10. *The Committee shall approve or not approve recommended candidates on the basis of a simple majority.*
11. *The Committee shall make recommendations with respect to every name submitted by Executive council on the day it appears on the agenda unless a majority of members agree to defer a recommendation to the next meeting.*
12. *Recommendations of the Committee shall be accepted by the Executive Council and the Minister responsible for the appointment.*

*The agenda for meetings and a list of recommended candidates and Form "A" will be provided to all members one week in advance.*

## INTRODUCTION

The Standing Committee on Human Resources, an all-party Committee of the House of Assembly, was struck at the beginning of the First Session of the Fifty-Ninth General Assembly, pursuant to Rule 60 of the *Province of Nova Scotia Rules and Forms of Procedures of the House of Assembly*. The Committee's membership, during the First Session of the General Assembly, was as follows:

Mr. Ron Chisholm, MLA – Chairman  
Guysborough – Sheet Harbour

Mr. Brooke Taylor, MLA  
Colchester – Musquodoboit Valley

Mr. Cecil O'Donnell, MLA  
Shelburne

Mr. Frank Corbett, MLA  
Cape Breton Centre

Ms. Maureen MacDonald, MLA  
Halifax Needham

Ms. Joan Massey, MLA  
Dartmouth East

Mr. Russell MacKinnon, MLA  
Cape Breton West

Mr. Leo Glavine, MLA  
Kings West

Ms. Diana Whalen, MLA  
Halifax Clayton Park

During the First Session of the Fifty-Ninth General Assembly the following changes were made to the Standing Committee on Human Resources membership. Ms. Maureen MacDonald, MLA (Halifax Needham) was replaced by Mr. Howard Epstein, MLA (Halifax Chebucto) and Mr. Russell MacKinnon, MLA (Cape Breton West) was replaced by Mr. Keith Colwell, MLA (Preston).

## **PROCEDURES AND OPERATIONS**

The Human Resources Committee meets on the last Tuesday of every month to consider appointments to Agencies, Boards and Commissions. The Committee also meets periodically to consider other matters under their mandate. These meetings are held on Tuesday mornings in the Legislative Committees Office. During the First Session of the Fifty-Ninth General Assembly, the Human Resources Committee has met on the following dates:

October 26, 2004  
November 30, 2004  
December 14, 2004  
January 25, 2005  
February 1, 2005  
February 22, 2005  
March 29, 2005

April 26, 2005  
May 31, 2005  
June 7, 2005  
June 28, 2005  
July 26, 2005  
August 30, 2005  
September 27, 2005



## AGENCIES, BOARDS AND COMMISSIONS PROCESSES

During the First session of the Fifty-Sixth General Assembly (1993), an amendment was made to Rule 60 of the *Province of Nova Scotia Rules and Forms of Procedure of the House of Assembly*. This amendment increased the mandate of the Standing Committee on Human Resources. The Committee has been legislated to review potential appointments to all government Agencies, Boards and Commissions (ABC's).

60(2) For greater certainty, the Human Resources Committee is established for the purpose of

- (i) considering matters normally assigned to or within the purview of the Departments and Ministers of Education and Culture and of Labour,
- (ii) reviewing and approving appointments by choosing from a list of nominees provided to the Governor in Council pursuant to an enactment,
- (iii) reviewing and approving or not approving ministerial appointees to agencies, boards or commissions where, pursuant to an enactment, Governor in Council approval is not required, and
- (iv) for purposes of greater clarity and certainty, the Committee shall be guided by the terms of reference set out herein and which form part of this rule;

Currently there are approximately 225 Agencies, Boards and Commissions (ABCs). Most ABCs are advisory bodies by nature, established by statute, regulation or policy. They make financial, regulatory, business or policy recommendations/decisions that have far reaching implications for Nova Scotians. There is no set formula for remuneration for persons serving on Agencies, Boards and Commissions. Remunerations is determined at the department level.

## APPROVAL PROCESS

There are two ways in which an appointment can be made to an ABAC. They are as follows:

1. **Order in Council**  
Order in Council appointments require both the Executive Council and the Lieutenant Governor's approval. Upon completion, an Order in Council is issued.
2. **Ministerial**  
Ministerial appointments are made by the Minister responsible for the legislation that establishes the Agency, Board or Commission. These appointments are forwarded to the Executive Council for information purposes. The appointment process is complete when approval is given.

Most board appointments are sent to the Human Resources Committee for approval after they are approved by the Executive Council. The material is received no later than the Friday, eleven calendar days prior to the scheduled Human Resources Committee meeting. The material is copied and distributed to all Committee members on the Tuesday, one week in advance of the meeting, as dictated by the *Province of Nova Scotia Rules and Forms of Procedures of the House of Assembly*.

If the appointments are approved by the Human Resources Committee, the documents are returned to the Executive Council Office and placed on the Order paper for the Lieutenant Governor's signature.

If the appointments are not approved by the Human Resources Committee, the documents are returned to the Executive Council Office, whereupon they will be returned to the appropriate department with a letter from the Clerk explaining the circumstances surrounding the rejection.

### **BULK ADVERTISEMENT**

Once every six months a list of upcoming vacancies for all ABCs is generated. These vacancies must be advertised through Communications Nova Scotia in the Chronicle Herald, Daily News and the Cape Breton Post as per the Standing Committee on Human Resources' advertising policy (July 23, 1998). Since then the Committee has revised the distribution of the bulk advertisement to include the following:

- Bulk ad to appear in all six dailies: Chronicle Herald, Halifax Daily News, Cape Breton Post, New Glasgow Evening News, Truro Daily News, and the Amherst Daily News;
- Executive Council website was expanded to include a full list of ABCs and more information on specific groups;
- All ads to include website address and toll-free phone number;
- Two-week Eastlink cable television campaign;
- Teaser ads to appear in community weeklies;
- Additional insertions of the bulk ad to appear in the Progressive Choices Magazine for Women, Street Feat and the Mi'k Maq-Maliseet Nations News as well as Touch Base magazine.

The Standing committee on Human resources Clerk organizes the bulk Advertisement. Departments can still place ads for individual ABCs when required. The Standing Committee on Human Resources needs to be informed of supplementary ads prior to placement to ensure that the advertising policy is being followed.

All applications from the bulk ad are received by the Executive Council Office and forwarded to the department assigned responsibility for the ABC. An up-to-date database of applications and appointments is kept at the Executive Council Office.

## **SCREENING AND SELECTION PROCESS:**

Once the individual applications are forwarded to the Department, the screening process takes place. Departmental Screening Panels provide a mechanism to determine qualified candidates for appointment in an effort to assist ministers in the selection of candidates to fill vacancies on ABCs. Screening panel members include both departmental staff and lay members and are selected by ministers on the basis of experience in the area of concern of the department, having regard to expertise, regional representation, gender, racial and other affirmative action considerations. Screening panels screen for qualifications only and do not rank candidates relative to each other.

The mandate of the Screening Panels, as established by the Executive Council Office, is as follows:

### ***Screening Panels***

*Screening panels were established as a matter of discretion. The purpose of screening panels was to establish a mechanism to determine qualified candidates for appointment to ABCs, to assist ministers in the selection of candidates to fill vacancies on ABCs.*

*Screening panel members are selected by ministers on the basis of experience in the area of concern of the department, having regard for expertise, regional representation, gender, racial and other affirmative action considerations. Departmental staff assist the minister in recruiting screening panel members, having regard to the experience in the area of concern of the department, having regard to expertise, regional representation, gender, racial, and other affirmative action considerations.*

After selection of successful appointees, the paperwork is prepared in the department and forwarded to Executive Council. There the paperwork is checked by the Clerk for Form and Authority. The items are then placed on the next available Cabinet agenda.

## **WAIVER OF NOTICE**

If subsequent material arrives from the Executive Council Office after the one-week deadline has occurred, it can still be distributed to the Committee members, but before it can be considered at the scheduled meeting, a Waiver of Notice must be signed and given to the Human Resources Committee Clerk. The signing of the waiver must be unanimous. If there is one Committee member who objects to the items being added to the agenda, the item will be tabled and placed on the agenda for the next meeting. The same procedure holds true if for some reason the Human Resources Committee's policies and/or procedures are not adhered to (i.e. ABC not advertised).

Contained within appendix A is the list of all the Appointments to Agencies, Boards and Commissions that have been approved, not approved, stood or withdrawn from consideration by the Standing Committee on Human Resources from October 2004 up until September 2005.

*In accordance with the mandate of the Standing Committee on Human Resources the Committee has looked at various topics of concerns related to Education, Culture and Labour. The following summary outlines the various issues and concerns that representatives of these areas brought before the Standing Committee.*

## **PUBLIC SERVICE COMMISSION**

**(Civil Service Wrongdoing and Occupational Health and Safety Policy and Regulations)**

**October 26, 2004**

### **WITNESSES**

#### Public Service Commission

Mr. Rick Nurse – Commissioner

Mr. Gordon Adams – Executive Director of Planning and Coordination

Ms. Patti Pike – Executive Director of Strategic Human Resources Management

Mr. Joel Marsman – Senior Consultant of Employee Health and Safety Promotion

Ms. Rebecca MacKay – Policy Analyst

Ms. Colleen Gareau – Communications Advisor

### **PRESENTATION**

#### *Disclosure of Wrongdoing*

The disclosure of wrongdoing regulations and policy is to attempt to clearly define wrongdoing and to include reprisal in the definition reprisal; to provide a process for employees who want to disclose; to protect employees from reprisal being taken should they disclose; to protect their privacy and the privacy of other witnesses involved in the process and finally to be sure that accountability is afforded to the employee and the public at the end of the process.

Disclosure regulations and policy are a guide for all employees of the provincial government to the process for disclosure of wrongdoing. The key elements are the application, the definition, the process, the protection aspects of the policy and the accountability.

#### *Application*

The regulations and policies apply to all employees who are direct employees of the government, including casuals and contract employees. The definition includes wrongdoings relating to illegal or unethical acts, gross misconduct, risk of harm or danger to individuals.

### Choices

Through the regulations and policy, if an employee chooses to initiate the formal disclosure process, they may contact the immediate supervisor, the deputy head or the Ombudsman.

The regulations further enable an employee who feels that the situation may create imminent and serious danger to life and health, to contact the police. Another choice for employees with concerns about wrongdoing is to approach the Conflict of Interest Commissioner for general advice.

### Protection

Protection against reprisals is described and also a list of what might constitute reprisals; i.e., disciplinary measures, demotions, or terminations. These regulations do not interfere with the Civil Service collective agreements or other rights under the Civil Service regulations. Protection for employees against malicious disclosure is included in the policy and regulations.

### Accountability

Accountability requirements in the regulations and policy will ensure that the system is accountable on a regular basis to the employee. Accountability requires the supervisor or the deputy head to investigate, to respond and to take actions in a reasonable period of time. The Ombudsman is required to give written notice to the employee within certain time frames and specifications. The accountability of the Public service Commission requires that the Commission report annually to the minister who tables the report in the House of Assembly, thereby making it publicly available.

PSC will develop a database to contribute to all of the reporting processes and other instructions to the Commission. They will consult with ABCs to encourage those agencies associated with government to introduce similar policies and practices.

### *Occupational Health and Safety*

The OH&S is divided into three areas: one, the relationship between the Act and regulations, which is a public and private workplace guide. Two, the corporate OH& S policy, with which the Public Service Commission and all departments are expected to comply and three what the Public Service Commission's role is in government with respect to OH&S.



## Act and Regulations

The occupational health and safety legislation assigns responsibility to the Department of Environment and Labour, which has an advisory council to recommend additions or alterations to regulations. Those Acts and regulations apply to public and private sectors. In the public sector context the Commission has a monitoring role, as an employer, respecting applicable policies and objectives.

## Corporate Policy

The corporate OH&S policy outlines the policy objectives which are: to ensure that government workplaces are compliant with the Act and regulations; to be sure that preventive measures are taken in workplace behaviour and to be sure that all levels of management are held accountable for compliance with policies and regulations. The Commission's role is to develop and implement policies and guidelines that help departments and employees adhere to this important issue and to implement the same policies and procedures within the commission.

## PSCs Role

In 2001-03 the Public Service Commission not only went through its own overall review and role change, but also looked at its role in the area of occupational health and safety. In 2003, they submitted a report in which there were 19 recommendations. Of those recommendations, 60 per cent have been acted on fully and the other 40 per cent are currently being pursued. Some of the recommendations were: to raise awareness on OH&S; to re-establish the audit practices that were in place previously; to address and add resources in this area, where needed, and for the Commission to provide strategic leadership.

A senior OH&S position has been created within the Commission and OH&S targets have been made part of the performance management process for all managers which includes deputy ministers. A Master OH&S Committee, made up of senior labour leaders and managers from within the Public Service which monitors PSC progress advised managers to renew the audit process and to make sure that those audits now continue to be done throughout government.

PSC is now in the process of ensuring an annual review of the corporate HR policy, where all departments, through their committees, are asked to confirm that they have reviewed it, understand it and if they have suggestions, to bring them forward.

Finally, with regard to resources, there are currently 20 individuals providing professional OH&S service across government departments. Four of those positions were created as a follow-up to the OH&S review of the Public Service Commission. There are about 120 joint occupational health and safety committees in place in compliance with the legislation.

PSC will soon announce a 'Workplace Wellness Strategy', which has a much broader focus and will consist of three elements, personal lifestyle and work habits, psychosocial issues and physical work environment. The Public Service Commission is responsible for reviewing all policies in the Manual 500, the corporate OH&S policy and the harassment policies. The personal protection policy is meant to address workplace violence or threatening behaviour and to ensure employee support.

## **MATTERS OF DISCUSSION**

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the Committee discussed.

- Communication process;
- Reporting steps;
- Development of regulations;
- Comparison with other Provinces;
- Protection of employees against malicious disclosures;
- Harassment policy;
- External agency;
- Investigative process from the offender's point of view;
- Time limits for disclosures;
- Employees covered under the Act;
- Occupational Health and Safety; violence in the workplace;
- Workplace Wellness Campaign.



### **MOTIONS/RECOMMENDATIONS**

There were no motions or recommendations made by the Standing Committee on Human Resources at this time.

### **DOCUMENTATION**

There was no documentation requested by the Standing Committee on Human Resources at this time.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2004oct26.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2004oct26.htm)



**STUDENT DEBT  
(University Tuition Fees)**

**November 30, 2004**

**WITNESSES**

Alliance of Nova Scotia Student Associations

Ms. Joanna Laskey – Executive Director

Mr. Curtis McGrath – President of Dalhousie University Student Union

Mr. Ryan Foley – Vice President External, Saint Mary's University Student Union

Canadian Federation of Students

Ms. Danielle Sampson – Executive Representative (Nova Scotia)

Ms. Anna Wilson – Deputy Chairperson

Mr. Ave Hare – National Treasurer

Mr. Matthew Currie – Vice President, Student Life, Mount Saint Vincent Student Union

Mr. Scott Saunders – Vice President External, Student Union of NSCAD University

Ms. Holly Farrell – Student-at-Large, Saint Mary's University

**PRESENTATION**

*Canadian Federation of Students*

The past 10 years has seen large increases in student debt requiring students to borrow to finance their post-secondary education. Currently, Nova Scotia students pay the highest tuition fees in the country and with increases in fees has come diminished access for low-and middle-income students. Large debts are leading to a diminished quality of life for students as well as reduced participation rates in the classroom.

Accompanying these increases in tuition have been increasing cuts to government funding. The Nova Scotia Government funds only 41.9 per cent of university budgets leaving students to contribute over 28 per cent. Immediate implementation of upfront, non-repayable student financial assistance in the form of needs-based grants is needed to address this problem. The elimination of Nova Scotia's Loan Remission Program in 1999 – 2000 followed the introduction of the Millennium Scholarship Foundation. The loan remission program created a loan ceiling and was worth twice as much as the current non-refundable financial aid.

The new Debt Reduction Program is worth only \$5.1 million, and replaces only half of the non-refundable financial aid assistance that was eliminated in 1999-2000. This program is unable to address the issues of the access and equality for low-and middle-income students.

## Recommendations

The Nova Scotia Government must introduce grants and not student loans. Grants are the only system of financial assistance to increase access and participation in post-secondary education.

- The Nova Scotia Government need to increase its funding and reduce tuition fees. Provinces such as Ontario, Manitoba, Quebec and Newfoundland all have freezes or reductions in their tuition fees.
- It is necessary for the Nova Scotia Government to legislate a tuition fee freeze and increase post-secondary education funding so as not to compromise quality.

There has been much discussion around income-contingent repayment loan schemes that are a model of funding, not student financial assistance. For women and minorities, income-contingent repayment loans force these groups to pay for their education by extending their debt. The Canadian Federation of Students opposes any designation policy that applies to publicly funded institutions.

### *Alliance of Nova Scotia Student Associations*

The past decade has been marked by a reduction in government funding for post-secondary education. This has led to a downloading of costs onto students and their families. As tuition fees continue to escalate, students and their families are forced to borrow greater amounts of money, which in turn means students are graduating from universities with insurmountable debt loads.

Students are turning to private lending institutions to finance debt. Thirty per cent of students in Canada owe money to private sources.. Currently in Nova Scotia, 48.1 per cent of university students graduate with debt loads, nationally it is 42 per cent. In 2001-02, 23.1 per cent of debt loads exceeded the \$25,000, while the national average is 13.4 per cent.

Nova Scotia students are having a more difficult time repaying their debts. Just as post-secondary education is intimately linked to social and cultural prosperity of the province, students from rural communities are unable return to their homes because they are forced to take higher-paying jobs in urban areas to cover their loan payment. This denies rural regions the social and economic benefits of higher education.

Loan repayments and the omnipresent threat of default are a crippling burden on students when they are at their most financially vulnerable. Student debt unfairly penalizes those students who are least able to pay for their education.

A social gap exists in post-secondary participation. Students coming from lower socio-economic backgrounds are more likely to borrow more and have a harder time coping with their higher debt-to-earning ratios. Evidence has been mounting which demonstrates that students are not pursuing post-secondary studies because the cost burden is viewed as too great.

Students from less-educated family backgrounds are far less like to return to studies after the completion of an undergraduate degree which is particularly troublesome for more expensive professional programs, such as medicine and law. Nova Scotia must invest in its future by investing in post-secondary students. The provincial government must make significant increases to core funding for post-secondary education. A series of targets aimed at bringing tuition fees in line with the national average need to be set and a special effort made to ensure that quality is not adversely affected.

### Recommendations

The provincial government needs to create a student financial aid package that includes both upfront and back-end measures for debt management.

- A robust grant system needs to be developed to assist those who need it most and these must be in the form of upfront grants. Upfront money creates the impression of a government that is supportive and working to get a student into school.

Other issues that should be addressed in the student financial aid package are:

- Interest on student loans must be significantly lowered if not eliminated;
- The provincial government should commit that any federal funds for student aid are not displaced from the current system's dollars;
- Parental contribution expectations should be revisited and
- The government should consider moving towards a system of integrated and harmonized loans.

The government needs to effectively communicate with post-secondary students. A large portion of students who are currently defaulting on their student loans are neglecting to access interest relief programs, despite being eligible for this assistance.

The association appreciate that the provincial government has limited financial resources and that the government is at a distinct disadvantage with regard to federal transfers, because they are distributed on a per capita basis, rather than a per student basis. The Alliance of Nova Scotia Student Associations would stress the necessity for the provincial government to begin to advocate for a pan-Canadian accord on post-secondary education, including earmarked funding for education.

## **MATTERS OF DISCUSSION**

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Designation policy;
- Re-introduction of the Needs-Based Grant;
- Federal Low-Income Grant Program;
- University food banks;
- Lack of student consultation regarding the Multi-Year Funding Agreement;
- Student Loan Remission Program; and
- Federal government funding.

## **RECOMMENDATIONS/MOTIONS**

In regard to the Memorandum of Understanding consultations where student representatives stated they were not directly involved in the negotiations, the Standing Committee on Human Resources unanimously passed the following motion:

“The Standing Committee on Human Resources recommends that the government consult extensively with student leaders of all post-secondary institutions in this province before any further announcements are made concerning student debt and the Memorandum of Understanding, and that these consultations be a standard mode of practice”.

In response to the motions, the Department of Educations replies:

“Prior to the signing, the Council of University Presidents representatives, the Minister and Deputy Minister of Education and other government officials met with students to both brief them on the MOU and to hear their comments. The minister also met with the students on October 1, 2004 for a briefing . . . Students are also represented on University Boards of Governors and as such received information as University Presidents proceeded through the MOU process. The Department of Education will certainly look to improve the involvement of students on higher education issues”.

**DOCUMENTATION**

There was no documentation requested by the Standing Committee on Human Resources at this time.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2004nov30.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2004nov30.htm)





**NOVA SCOTIA GOVERNMENT AND GENERAL EMPLOYEES UNION**  
(Civil Service Disclosure of Wrongdoing Regulations and Policy)

**December 14, 2004**

**WITNESSES**

NSGEU

Ms. Joan Jessome – President

Mr. Ian Johnson – Policy Analyst / Researcher

**PRESENTATION**

The Nova Scotia Government and General Employees Union (NSGEU) met with the Standing Committee to discuss the effect of the current regulations and policy on civil service members. NSGEU would like to see a simpler, safer and more effective approach through legislative protection.

In 2003, NSGEU polled their members in advance of the current round of bargaining and found that 27 per cent of Civil Service members had witnessed some form of wrongdoing, but were afraid to report it. The Public Service Commissions, Employee Opinion Survey showed that less than half (46 per cent) of respondents felt that they could report concerns about ethical dilemmas or conflicts without fear of reprisals.

The NSGEU views the regulations and policy as ineffective because regulations can be changed or removed, and feels that the requirement to use a written form may discourage employees from reporting their concerns.

Employees are required to go through internal channels before going to the Ombudsman unless there is imminent and serious danger to life, health or safety, and there is not sufficient time to make a disclosure under these regulations and policy. The Ombudsman's Office cannot investigate disclosures unless an employee has exhausted all other procedures beforehand, and the Commission's fact sheet also outlines the need to go through internal channels first. Any concerned employee is encouraged to seek advice from the Conflict of Interest Commissioner before going through the designated process. NSGEU feels that this serves to delay possible action on employee concerns.

NSGEU are also troubled by the time limit of only a year to report any disclosure and about the time limits for responses and the fact that no employee can go public about their concerns.

The regulations and policy provide a whole section to prevent false or misleading disclosures. However, there is no clarity as to what types of actions by employees are or are not covered or who determines what is bad faith disclosure. NSGEU members frequently come to them after all other routes have been exhausted. There appears to be no provision to require a bad faith disclosure be proven before action can be taken or that an employee has the right to appeal such a determination.

Finally, if any concerns are taken to the Ombudsman, there appears to be no requirement to report on the specific types of disclosures and any specific recommendations proposed as well as the response of the relevant department or organization.

NSGEU agrees with the Commission on the need to protect employee disclosures. They have major differences on what specific provisions should be offered and in what form. NSGEU reported that there have been legislated protections in place in other jurisdictions prior to these regulations and policy. New Brunswick and Saskatchewan have had some protection in their labour or employment standards laws for several years. The Criminal Code was recently amended to make it a criminal offence for an employer to prevent whistle blowing or seek retaliation, but only applies to violation of the legislation.

New federal legislation has been tabled this Fall to provide disclosure protection to federal public servants. Employees are still being required to go through internal channels in order to receive any legislation protection, the limited types of concerns to which it applies and punishment for frivolous or vexatious complaints.

#### Recommendations

NSGEU would like to see a separate piece of legislation that would provide the following:

- Apply to all workers in the public and private sector.
- Cover violations of duties and standards, as well as legislation.
- Allow a concerned employee to go directly to an independent person who can investigate an employee's concern and report on them in a timely manner without seeking anyone's prior approval.
- Provide adequate resources to this independent person to investigate and report on employee concerns.
- Require a response from the relevant department, agency, board, commission or other body in a timely manner.
- Prevent an employer from taking reprisals and not just provide protections to an employee who has been subject to them.

NSGEU views employee disclosure protection as a serious issue that goes to the heart of the system of government and individual rights and feels that the current Civil Service regulations and policy do not provide the necessary protections that employees want and deserve. Simple, secure and effective legislative protections are needed, therefore NSGEU recommends that the Standing Committee,

- Ask the Ombudsman to appear before them on the adequacy of these regulations and policy, and the extent to which his office has heard from concerned civil servants.
- Call upon the government to scrap the current regulations and policy.
- Urge the Public Service Commission and perhaps representatives of other relevant departments and agencies to work jointly with the labour movement on a new piece of legislation, similar to Bill No. 32 that would apply to public and private employees.
- Encourage the development of legislation and other possible assistance to support the establishment of an independent, non-partisan organization, to promote and assist employee disclosure protection. These organizations are in place around the world such as Public Concern at Work in the United Kingdom.

## **MATTERS OF DISCUSSION**

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Civil servant protection regulations prior to current regulations;
- Employee fear of reprisal for disclosing wrongdoing;
- Health and Health Care Workers;
- The need for adequate protection and stronger legislation;
- Protection of employees under the Occupational Health and Safety Regulations; and
- Protection for both public and private workers.

## **RECOMMENDATIONS/MOTIONS:**

During discussions surrounding the Disclosure of Wrongdoing Policy and Regulations, the Standing Committee on Human Resources has unanimously passed the following motion:

“That the Standing Committee on Human Resources call upon the government to scrap the current regulations and policy and to bring forth new whistleblower protection legislation in the Spring session; and to use the time in between to consult widely with all stakeholders within the province with respect to what whistleblower legislation would look like that would really afford some protection to the workers of this province”.

## **DOCUMENTATION**

There was no documentation requested by the Standing Committee on Human Resources at this time.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2004dec14.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2004dec14.htm)

**NOVA SCOTIA OFFICE OF THE OMBUDSMAN**  
**(Civil Service Disclosure of Wrongdoing Regulations and Policy)**

**February 1, 2005**

**WITNESSES**

Nova Scotia Office of the Ombudsman

Mr. Dwight Bishop – Ombudsman

Ms. Julie Vandervoort – Investigator

**PRESENTATION**

The Civil Service Disclosure of Wrongdoing Regulations under the Civil Service Act assign certain responsibilities to the Office of the Ombudsman; these regulations sets out an investigative and a reporting role which includes the concept of independence and confidentiality. The reporting role recognizes a threshold requirement of the legislation usually termed “reasonableness” while the reporting role puts emphasis on investigations, making recommendations and submitting an annual report.

There are two means that can be used to direct concerns to the Ombudsman’s Office, one from the employee and one from the deputy head. The regulations state that the Ombudsman’s Office must investigate the concerns unless particular criteria exists.

With respect to the regulations, the Ombudsman’s Office has developed an internal screening process. For example, if the Ombudsman’s Office receives a call from an employee regarding specific matters, the office representatives, or investigators will walk the employee through the process set out in the regulations. At the same time, depending on the sensitivity of the issue, they might offer to meet with the person face to face.

The regulations stipulate that the investigation be carried out with independence, confidentiality and competence. The regulations create certain obligations for the Ombudsman in terms of reporting. In the investigative role, there are notification requirements and the Ombudsman’s Office must issue an investigation report and recommendations. There is also a reporting obligation at the end of the year where they submit a report to the commissioner.

## **MATTERS OF DISCUSSION**

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Public knowledge of recommendations by the Ombudsman's Office regarding disclosure of wrongdoing;
- Recommendation process as set out in the Disclosure of Wrongdoing Regulation and Policy;
- Twelve-month timeline requirement to report wrongdoing;
- Regulations that allow an individual to go directly to a policing body other than the three-step process;
- Effectively communicating the role of the Ombudsman's Office to the public;
- Ombudsman's response to complaints;
- Confidentiality of complaints as set out in Section 24 and 16 of the regulations;
- Ombudsman's Office internal screening process upon receiving complaints; and
- Investigative process and the number of complaints of wrongdoing received by the Ombudsman's Office.

## **RECOMMENDATIONS/MOTIONS**

There were no motions or recommendations made by the Standing Committee on Human Resources at this time.

## **DOCUMENTATION**

During the meeting the Standing Committee on Human Resources requested that the Ombudsman provide the committee, in writing, confirmation of what legal advice was received from the Department of Justice prior to meeting with the Committee.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2005feb01.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2005feb01.htm)



**DEPARTMENT OF EDUCATION  
(Student Debt)**

**February 22, 2005**

**WITNESSES**

Department of Education

Mr. Dennis Cochrane – Deputy Minister

Mr. Kevin Chapman – Manager, Student Assistance

Mr. Bill Turpin – Communications Advisor

**PRESENTATION**

With respect to government-funded student financial assistance, the federal and provincial governments between themselves seek to ensure that no qualified student is denied access to post-secondary education as a result of financial constraints.

The Nova Scotia Student Assistance Office administers a number of programs including the Canada and Nova Scotia Student Loan program, the Nova Scotia Debt Reduction Program and the Canadian Millennium Scholarship Program. The Department also delivers on behalf of the federal government the Canada Studies Grant, Interest Relief and other initiatives with regard to student financial assistance.

**Canada Student Loan Program**

Under the Canada and Nova Scotia Student Loan Programs students were previously eligible for a weekly limit of \$315; however, the federal government portion is increasing to \$210, allowing students to receive up to \$360 per week.

The average Canada student loan for a student in Nova Scotia is \$5,327 a year and the average Nova Scotia student loan is \$4,189. The Department of Education has an Interest Relief Program whereby it covers all interest on the student's loan for the first six months following graduation. Federally, the first six months of interest is covered but thereafter it is consolidated into a capital loan.

### Debt Reduction Program

Through the Debt Reduction Program due to expire in 2009, students who study in Canada and who graduate from the program for which they received their loan may have up to 60 per cent of their total loan limit covered, or up to 40 percent if they did not receive a Canadian Millennium Scholarship. The total contribution from the Canadian Millennium Scholarship Program has decreased from about \$8.9 million to \$8.6 million as a result of a shift in the provincial population.

### Canada Studies Grant Program

The Canada Studies Grant Program provides grants to a number of targeted populations such as high-needs students with dependents, high-needs student who are disabled, female doctoral students, students with permanent disabilities and high-needs part-time students. Nova Scotia's portion of the total given out in that category is about \$4.3 million. At the time of creating the Memorandum of Understanding with the universities the department negotiated a cap on their tuition with the exception of medicine, dentistry and law programs.

There were about 1,800 applications to the Debt Reduction Program and although the department tries to process the loans on behalf of the federal and provincial governments, the rules are quite different when loans become consolidated, go into collection, and with regard to interest relief. The federal and provincial governments need to look at trying to restructure the Canada Student Loans Program and the Provincial Student Loan Program.

The Department of Education has indicated that they will continue to try to ensure that institutions are providing the best possible service and quality programs to the students in the Province of Nova Scotia.

### MATTERS OF DISCUSSION

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Cost of tuition in Nova Scotia;
- Lack of consultation with students on the Memorandum of Understanding process;
- Student inclusion in future negotiations;
- Designation framework;
- Re-instatement of needs-based grants;
- Availability of loans and rules surrounding financial aid to part-time and independent students;
- Accessibility to university education for under-represented groups;
- Amount of student debt since 2000 and the number of students leaving the province to find employment elsewhere to pay off these debts;
- Levels of financial assistance available;



- Cost recovery programs;
- Debt Reduction Program vs. the Canadian Millennium Program;
- Memorandum of Understanding of professional schools: Law, Dentistry and Medicine;
- Statistics on socio-economic status (SES) students in university;
- Threshold for parental contributions; and
- Options and Opportunity program (O2).

### **RECOMMENDATIONS/MOTIONS**

There were no motions or recommendations made by the Standing Committee on Human Resources at this time.

### **DOCUMENTATION**

During the meeting the Standing Committee on Economic Development has requested the following documentation:

- Information and figures on the Debt Reduction Program.
- A detailed breakdown of the debt loads carried by graduates of Community Colleges, Private Institutions and Universities.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2005feb22.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2005feb22.htm)



**WORKER'S COMPENSATION BOARD  
(Former Board Members)**

**March 29, 2005**

**WITNESSES**

WCB – Former Board Members

Mr. Jim White

Ms. Charlene Long

Mr. Elwood Dillman

**PRESENTATION**

By the early 1990's, the WCB had 27 per cent of its liabilities funded; a \$400 million shortfall. Cutting benefits and increase rates was a solution but was considered risky. Legislation was passed that gave responsibility for the WCB to an independent stakeholder board with representatives from employers, organized labour and the public. A major achievement of the board was the possibility of retiring the unfunded liability in 2014 or earlier.

Explicit WCB board policy was to maintain the current course until the unfunded liability could be eliminated. However, the Government Restructuring Act in 2001 designated the WCB as a 'government agency' and brought budget approval under the Treasury Board. The passage of the Volunteer Fire Services Act indicated a change in the operation of the WCB board.

Since the reforms of the early 1990's, the stakeholder representatives on the board with the assistance of the public, non-voting representatives focused both on consensus building and on the long-term effects of board policy.

**Chronic Pain**

The Martin decision of the Supreme Court of Canada on the difficult issue of chronic pain and the new chronic pain policy, which detaches the relationship between the injury and the workplace, has raised the prospect of destroying the financial viability of the WCB.

The Martin decision required the WCB to individually assess workers who had developed chronic pain and to apply a modified American Medical Association guide to assess chronic pain claims, which recognizes only rateable pain as compensable. The WCB policy of awarding benefits for unrateable pain means that no objective medical evidence of injury is required to qualify for benefits. Objective medical evidence is necessary to determine whether the chronic pain arose from a compensable injury.

### Stakeholder Representation

The composition of the board has changed with the inclusion of direct stakeholder representatives, which may adversely affect the board's decision-making.

### Governance

The Board of Directors' Governance and Human Resources Committee had produced a corporate governance manual, which clearly delineates the responsibilities, as outlined in the Act, of the directors, the chairman, the deputy chairman and the CEO.

However, the previous stakeholder consultation process has changed and does not include the directors anymore. The process has become one where the chairman and the deputy minister receive direct contact from injured workers, and government direct contact from some of the employers.

The financial viability of the WCB is critical to the long-range economic health of the province. Nova Scotians deserve a WCB, which is financially viable.

### MATTERS OF DISCUSSION

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Vote of non-confidence in the Chairman of the Board;
- Special Interest Groups and other associations as members of the board;
- Appointment process to the WCB;
- Governance and Accountability of the WCB;
- The number of chronic pain applications;
- Complement of the board;
- Relationship between the chairman and the Minister of Environment & Labour and the omission of the board members;
- Financial viability of the board regarding chronic pain and its increase on the unfunded liability;
- WCB Funding Strategy 2005;
- Change in WCB leadership; commitment from Government to let WCB be an arms-length organization;
- Occupational Health and Safety; and
- Prevention of workplace injuries and work safe program.

### **RECOMMENDATION/MOTION**

There were no motions or recommendations made by the Standing Committee on Human Resources at this time.

### **DOCUMENTATION**

There was no documentation requested by the Standing Committee on Human Resources at this time.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2005mar29.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2005mar29.htm)



## **SPECIAL EDUCATION**

**May 31, 2005**

### **WITNESSES**

#### Department of Education

Mr. Dennis Cochrane – Deputy Minister (Department of Education)

Mr. Mike Sweeney – Executive Director (Public Schools Branch)

Ms. Ann Power – Director (Student Services)

Ms. Sue McKeage – Director (Communications)

Mr. Alex Bruce – Consultant (Student Services)

### **PRESENTATION**

The Learning for Life II program sets the stage for more work in the field of Special Education. It reiterates the fact and the belief that all students deserve to learn to the best of his or her ability. Currently there are about 143,000 students in the public school system in the province of which twenty per cent receive some level of special support. These are students who receive individualized or small-group support as they work their way through the system. About three per cent require intensive support and of that three per cent most are on what it called an Individual Program Plan (IPP) that is put together by the professional staff at the school supported by district staff and the parents. The IPP program examines what kind of interventions the child might need in order to succeed and achieve the goals and the outcomes that are set for them. About .5 per cent of students benefit from severe learning disability services. This program would be a much more intensive kind of service. Lastly, about .4 per cent of students receive behavioural support.

The other end of the spectrum deals with gifted children who are also in the category of students with special needs. The department tries to challenge these students with more challenging aspects of the curriculum. One part of the Learning for Life II program dealt with the expansion of the International Baccalaureate program.

#### **Consultation**

Through consultation, the department has attempted to develop the kinds of services suited to the special needs students. The Special Education Implementation Review Committee (SEIRC) report put forth a number of recommendations, most of which the department has taken action on, a series of principal's workshops has been conducted where the services and programs being provided for children with special needs were topics of concern. One of the results of the principals' meetings was an agreement to track the number of guidance counsellors in the system and provide extra resources to try to provide more guidance counsellors throughout the system.

## Funding

The Department of Education's special education funding has increased from about \$48,000 in 1999 to \$66,000 in 2005-06. That is in addition to the regular money that is put into the system with regard to covering the per pupil expenditures. The department encourages school boards to look at the level of priorities and if necessary put more emphasis on one area than the other.

The department tracks and monitors student progress, and do have a number of pilot projects introduced province-wide, such as reading recovery program; programs to deal with severe learning disability students; and in-service respecting positive effects supports in the school system. The department continually evaluates the initiatives and makes sure that they put priority on accountability.

The SEIRC report recommended an additional \$20 million which has resulted in the department tracking the number of teachers in the system who are assigned to various core professional services as a result of additional funding and they also have a standard reporting process and a provincial report card for reporting the success of students on the Individual Program Plans

The department is trying to continue increased communications with parents through their new Transition Planning guide, which is designed to keep parents informed about how their child will progress through the system.

## MATTERS OF DISCUSSION

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Waiting Lists; individual assessments and evaluations. Public vs private;
- EPA's;
- Course requirements or professional development courses for special education teachers;
- Ratio of special needs students per resource teachers and specialists;
- Special Education students; social inclusion in classrooms;
- Learning for Life I & II Programs;
- Education budget; Gifted Students;
- Tracking suspension records;
- Behavioural problems of special education children impacting on academics in the classroom;
- Older Students with intellectual delays incorporating a system that will centre on the needs of these students; and
- Evaluation waiting lists for students with special needs.



## **RECOMMENDATIONS/MOTIONS**

There were no motions or recommendations made by the Standing Committee on Human Resources at this time.

## **DOCUMENTATION**

During the meeting the Standing Committee on Human Resources requested the following documentation:

- A definition of "gifted Student" and the document entitled, "Challenge for Excellence".
- Provincial data on behavioural studies and suspensions.
- Academic achievements, past and present on the impact of inclusionary practices on educational outcomes.
- Results on School Achievement Indicators Program (SAIP) testing.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2005may31.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2005may31.htm)



**WORKERS' COMPENSATION BOARD OF NOVA SCOTIA  
&  
THE DEPARTMENT OF ENVIRONMENT AND LABOUR**

**June 7, 2005**

**WITNESSES**

Workers' Compensation Board

Mr. Louis Comeau – Chairman (Board of Directors)

Ms. Nancy MacCready-Williams – CEO

Department of Environment and Labour

Mr. William Lahey – Deputy Minister

Ms. Barbara Jones-Gordon – Senior Policy Advisor

Mr. Bill Turpin – Communications Director

**PRESENTATION**

*Workers' Compensation Board of Nova Scotia*

If all recommendations that have been made to the WCB were to be acted upon, approximately \$500 million in new benefits would be added to the system. The current challenge is how to maintain rates and to deal with the unfunded liability. The Chairman and the Deputy Minister were appointed to work with stakeholders and to try to improve the governance structure of the board.

The WCB is arm's-length from government yet works closely with ministers, MLAs, department staff and other arms of the government regularly through legislation. Government controls the benefits package that WCB provide to injured workers. Government and the Legislature play a major role by establishing the legislative and regulatory framework under which the WCB operates. Therefore, the government and the Legislature are ultimately accountable to the people of Nova Scotia for the performance of the workers' compensation system and the WCB is accountable for its performance to the government.

In April, WCB issued a discussion paper, proposing a new direction of the workers' compensation in Nova Scotia which includes addressing the issues of rates, benefits, the unfunded liability and workers' safety.

*The Department of Environment & Labour*

The Chairman and the Deputy Minister were asked to undertake a review of governance and accountability to give stakeholders more confidence in the system, and assurance that they would have an opportunity for input and that they could support the decisions with respect to rates and the implications the rates will have for employers and with respect to the benefit levels and the importance they will have to injured workers and their families.

On May 19, 2005, the Legislature passed an amendment to the Workers' Compensation Act on the structure of the board. That amendment serves the purpose of giving effect to the consensus that the stakeholders reached in the governance and accountability process because it allowed implementation of the document that the stakeholders created --- "Statement of Principles and Objectives on Governance and Accountability". The legislative amendment eliminates non-voting, public-at-large members on the board and increases the number of voting members from six to eight, while maintaining parity between employer and employee representation.

**Statement of Principles and Objectives**

Two key aspects of the Statement of Principles and Objectives are first, in the nomination process the minister will make recommendations for appointment to the board based on recommendations from stakeholders. Second, the board is expected to remain connected to and in consultation with stakeholders as major decisions are made in the future, and to be open and transparent in decision-making processes.

One of the reasons for strengthening the accountability of the board to stakeholders is the need for a structure or a system to build upon the collaboration across the four agencies that make up the system. Although tremendous progress has been made in recent months in terms of the organizations working together, there needed to be even more collaboration and more consistency in pursuing a common set of strategic goals. The mechanism that the Statement of Principles and Objectives has created in that regard is a coordinating committee, which will be made up of the Deputy Minister and the Chairman of WCB. The role of that committee is to ensure that everyone working on behalf of those agencies is doing their best to advance the same set of strategic objectives.

**MATTERS OF DISCUSSION**

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Former board members resignations and the operation of the Workers' Compensation Board;
- Nomination process;
- Financial obligations and the unfunded liability;
- Timeframes for WCB appeals;

- New Workers' Compensation Board structure as legislated by the House of Assembly;
- Chronic pain; streamlining the process;
- Hiring of additional staff to handle the backlog of claims;
- The number of chronic pain cases pending and opened;
- Restructuring of the WCB Governance Policy;
- The Coordinating of the Deputy Minister and the Chairman and its role;
- Incentive rate program; assessment rates;
- Injured workers; workplace safety and prevention and OH&S; and
- The role/ mandate of WCB.

### **RECOMMENDATIONS/MOTIONS**

There were no motions or recommendations made by the Standing Committee on Human Resources at this time.

### **DOCUMENTATION**

There was no documentation requested by the Standing Committee on Human Resources at this time.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2005jun07.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2005jun07.htm)



**ACCESS AND FUNDING FOR POST-SECONDARY EDUCATION  
(Results of Recent Survey Poll)**

**June 28, 2005**

**WITNESSES**

Canadian Federation of Students

Ms. Danielle Sampson – National Executive Representative

Association of Nova Scotia University Teachers

Mr. Bernie Davis – President

NSGEU Post Secondary Occupational Council

Mr. Ken Clare – Representative

**PRESENTATION**

The Canadian Federation of Students, the Association of Nova Scotia University Teachers and the Nova Scotia Government & General Employees Union has formed a post-secondary coalition to fight for more government funding, lowering of tuition fees, and better accessible quality education.

The Memorandum of Understanding signed by the Council of Nova Scotia University Presidents and the Department of Education brought much-needed stabilization to university funding but also increased student tuition fees. Polling by the coalition in February of 2005, has indicated that many Nova Scotians believe tuition fees are too high and post-secondary education is out of reach for many.

The federal budget has mandated a considerable increase to federal funding, specifically earmarked for post-secondary education and the Nova Scotia Legislature has also resolved that those federal funds focus on tuition fees, an implementation of a needs-based grant system, and to assist with apprenticeship training.

The Coalition's recent poll found that in the last two years, more than 40 per cent of respondents had themselves, or someone in their family, denied a post-secondary education because of financial barriers. The government is willing to play a more active role in education policy and has been forced to make post-secondary education a Canadian priority.

Nova Scotia will receive up to \$34.5 million in this year to reduce tuition fees, implement grants, and assist with the apprenticeship training. This money will not only help more low-and middle-income students enter the system, but will help offset shortages in the labour market. Nova Scotia has a growing need for skilled tradesmen and medical professionals while many young, educated people leave the province to pay off their enormous student debts.

The federal government should provide funding to Nova Scotia on a per student, not per capita basis. The current funding formula does not account for the fact that Nova Scotia is a net importer of students and should be given adequate funding for educating those students.

It is the Coalition's recommendation that this funding go directly to reducing the cost of higher education for all students. There should be a legislated tuition fee freeze, followed by subsequent reductions for all students, including those left out of the Memorandum of Understanding.

Although it is useful for universities to have a multi-year commitment on funding, it is based on percentage increases more appropriate to university operations in 1995-96.

In renegotiating the Memorandum, there needs to be wider consultation with students, with faculty, with university employees and with under-represented groups. The survey and its results show a genuine feeling that tuition is too high and the effects of that high tuition is having an extremely negative impact on students in Nova Scotia. People are making decisions not to go to university and decisions to leave university once they are enrolled.

#### Recommendations

The coalition asks the Committee consider and accept the following recommendations:

- That the province continue to press for a per student allocation of the funds available under Bill C-48, which they believe was the understanding under which this provision was developed.
- That the allocation be limited to students attending publicly funded post-secondary institutions.
- That scenarios and studies on the allocation of these funds, developed by the Department of Education, be made available to all interested parties.
- That prior to any decision on tuition-relief measures or grant programmes, full consultation be carried out with all interested parties, particularly with student leadership.
- That, considering that these funds are to be allotted in the current year, this consultations should begin right away.



## MATTERS OF DISCUSSION

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Consultation Process; student inclusion during the negotiation of Bill C-48;
- Legislate a freeze on tuition;
- Re-introduce needs-based grants;
- Bill C-48 and federal government surplus of \$3 billion;
- Number of meeting held between student leaders and the Department of Education;
- Accessibility to Post-Secondary Institutions for under-represented groups; rural students;
- University budgets;
- Recruitment of international students;
- University infrastructure and infrastructure renewal;
- Increase in private sector donations; and
- Access to scholarships/bursaries.

## MOTIONS/RECOMMENDATIONS

During the meeting the Standing Committee on Human Resources has unanimously passed the following motions regarding international students working off-campus and the inclusion of student, faculty staff, university administration and student leaders being part of discussion panels regarding present and future agreements:

"The Standing Committee on Human Resources support these negotiations that are currently underway and that the student government leaders be part of the negotiations on behalf of international students and that international students be allowed to work off-campus."

"That Standing Committee on Human Resources call on the Minister of Education to commence discussions with students, faculty, university administration and Nova Scotia Community College representatives to develop a plan for the best allocation of these new funds from Bill C-48 to ensure they address student needs."

## **DOCUMENTATION**

There was not documentation requested by the Standing Committee on Human Resources at this time.

References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2005jun28.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2005jun28.htm)

**COUNCIL OF NOVA SCOTIA UNIVERSITY PRESIDENTS**  
**(Access and Funding for Post Secondary Education)**

**July 26, 2005**

**WITNESSES**

Council of Nova Scotia University Presidents  
(CONSUP)

Dr. Colin Dodds - President, Saint Mary's University & CONSUP Chairman

Dr. Philip Hicks - President, Nova Scotia Agricultural College & CONSUP Vice Chairman

Association of Atlantic Universities

Mr. Peter Halpin - Executive Director

Dalhousie University

Ms. Gillian Wood - Director of Government Relations

**PRESENTATION**

Over the years, Nova Scotia has become what is known as 'the education province', particularly at the post-secondary level. The province attracts a large number of students from out of the province, other parts of Canada and international students.

*Memorandum of Understanding Process*

The MOU process is a significant event in the recent history of Nova Scotia with the increased funding commitment and the universities commitment relating to capping tuition. In addition to this is a significant commitment in terms of research and development through NSRIT. The Nova Scotia Research & Innovation Trust (NSRIT) was created several years ago to provide matching funds; there was a further commitment by the government to replenish the NSRIT fund to about \$5 million.

There are other commitments that surpassed the MOU process. The universities have had a few positive meetings with the Office of Economic Development, Nova Scotia Business Inc. and with the newly developed Department of Immigration. Partnerships are being realized between these groups along with the momentum that the university and the college system can provide for future of Nova Scotia.

### *Bill C-48*

The universities believe they can play a leadership role in the allocation of the \$1.5 billion fund with a partnership with both levels of government and with other stakeholders, particularly student leaders.

This funding, coupled with other anticipated commitments in terms of a dedicated transfer based on the institution and the province in which the institution is located, can address the issue of affordability, capacity-building and quality.

Affordability is linked very much to the issue of accessibility, particularly of groups that are under-represented in the current system. Accessibility is a multi-faceted topic and deals with issues regarding the rural/urban situation; and situations where students attend university and then drop out of the system for a variety of reasons.

In terms of capacity-building, it was said that the \$1.5 billion that will be invested in the system may lead to an increase in enrolment whereby every qualified applicant can attend university and college. This is believed to lead to capacity constraints. The trend over the last few years shows enrolment has increased dramatically, without the increase in space and equipment.

Therefore, for universities to move forward in providing the quality that is recognized around the world, there needs to be a further increase in investment by both federal and provincial governments in operating and in capital, otherwise the universities may feel they will not have the capacity to move forward and/or be able to provide the quality maintenance they prefer.

### *Disadvantaged Groups*

The universities are aware of disadvantaged groups, students with disabilities, Aboriginal members and others. They would like to increase enrolment from rural areas as well. The universities commitment regarding accessibility is very important and they would like to see that all qualified Nova Scotians have the opportunity of studying at the post-secondary education level.

### *Initiatives*

With regard to the MOU process, universities were asked to confirm a one per cent productivity factor. That information is now flowing from the universities to the Department of Education, however, there are some initiatives that the universities have taken such as the Interuniversity Services Inc. (ISI), whose mission is to identify and promote opportunities for members to acquire goods and services with enhanced value and reduced costs. Secondly, Nova Scotia Power regarding the previous rate increases. The universities co-operated and received intervening status, along with others. By doing it co-operatively with a group, the universities were able to save a significant amount of legal fees.

Another initiative the universities have utilized for a long period of time is Novanet. This service provides students, faculty and staff with access to books. This has allowed the development of specialized collections, which are open to students and faculty to access.

In regard to the Coalitions concerns raised about the involvement of the private sector, CONSUP certainly concurs that the \$1.5 billion should in fact flow to publicly-funded institutions, but in the world of research and development it needs to be recognized that increasingly federal government initiatives do strongly support commercialization. Commercialization are not just spin-offs of companies; what the government is looking for in their innovation strategy is involvement and working with the private sector, small businesses and others and seeing options for that research within communities. Universities view the private sector as an important partner, and perceive the private sector and communities as key partners in pushing forward.

### **MATTERS OF DISCUSSION**

There were a number of issues discussed during the meeting, however outlined below are a few of this issues that the committee discussed.

- Access to post-secondary education;
- Accessibility for rural area students and needs based students;
- Campus infrastructure: renewing and rebuilding;
- Federal government funding: deferred maintenance;
- Enrolment levels: international recruitment;
- Cost of tuition;
- Private sector partnerships/contributions;
- Student representation/consultations; and
- Distribution of funds provided through Bill C-48.

### **MOTIONS/RECOMMENDATIONS**

There were no motions or recommendations made by the Standing Committee on Human Resources at this time.

## **DOCUMENTATION**

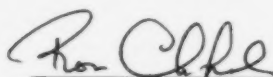
During the meeting the Standing Committee on Human Resources requested the following documentation:

- A copy of the regional study regarding the cost of attending university (Atlantic Omnibus Survey)

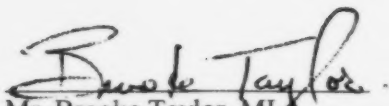
References to, and within, this transcript can be found on the Nova Scotia Government Web Site at: [http://www.gov.ns.ca/legislature/hansard/comm/hr/hr\\_2005jul26.htm](http://www.gov.ns.ca/legislature/hansard/comm/hr/hr_2005jul26.htm)

STATEMENT OF SUBMISSION

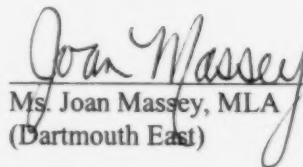
All of which is respectfully submitted to the House of Assembly  
this 29<sup>th</sup> day of November, 2005.



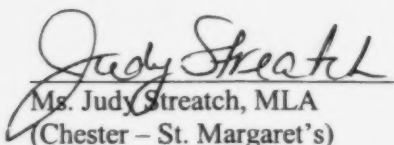
Mr. Ron Chisholm, MLA  
Chairman  
(Guysborough - Sheet Harbour)



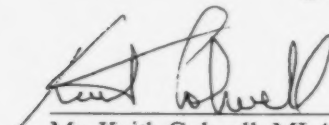
Mr. Brooke Taylor, MLA  
(Colchester - Musquodoboit Valley)



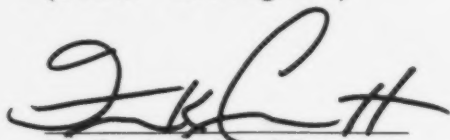
Ms. Joan Massey, MLA  
(Dartmouth East)



Ms. Judy Streach, MLA  
(Chester - St. Margaret's)



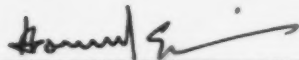
Mr. Keith Colwell, MLA  
(Preston)



Mr. Frank Corbett, MLA  
(Cape Breton Centre)



Mr. Leo Glavine, MLA  
(Kings West)



Mr. Howard Epstein, MLA  
(Halifax Chebucto)



Ms. Diana Whalen, MLA  
(Halifax Clayton Park)





## **NOTICES**

Notices of committee meetings are sent to all members of the Committee, caucus offices, Legislative staff and the House of Assembly Press Gallery and are posted in Province House.

## **VERBATIM TRANSCRIPTS**

Transcripts of these Committee meetings are available from the Legislative Committees Office or on the Committee's website at the following address:

<http://www.gov.ns.ca/legislature/COMMITTEES/index.html>

## **RESEARCH MATERIAL**

All research for the Human Resources Committee is compiled by the committee clerk and researcher and distributed to committee members one week prior to meetings.

## **ANNUAL REPORTS**

All reports from the Human Resources Committee are compiled and written by the committee clerk. Once the Chairman has approved the initial draft, it is then sent to the individual Committee members for consideration. The draft review complete, the final report is prepared and tabled with either the Speaker or the Clerk of the House.

Distribution of the report is as follows: to the Speaker, all member of the committee, government House Leader and Opposition Leaders, all witnesses who appeared before the Committee, the Legislative Library, Legislative Libraries in all provinces and territories, the media and all provincial caucuses. The report is also available to the general public upon request through the Legislative Committees Office and on the Legislature's website at the following address: <http://www.gov.ns.ca/legislature/COMMITTEES/index.html>

## ACKNOWLEDGEMENTS

The Committee wishes to extend its gratitude to the following witnesses for their time and cooperation: the staff and representatives of the Public Service Commission of Nova Scotia; the Alliance of Nova Scotia Student Associations, the Canadian Federation of Students; the Nova Scotia Government and General Employees Union; Nova Scotia Office of the Ombudsman; the Department of Education; Former WCB Board Members: Mr. Jim White, Ms. Charlene Long & Mr. Elwood Dillman; Special Education Division of the Department of Education; the Department of Environment & Labour, the Worker's Compensation Board of Nova Scotia; the Association of Nova Scotia University Teachers, the NSGEU Post Secondary Occupational Council and the Council of Nova Scotia University Presidents. Special thanks goes out to Mr. Paul LaFleche, Secretary of the Executive Council and staff; Mr. Robert Kinsman, Manager of Hansard and staff; Mr. Jim MacInnis, Co-ordinator of Legislative Television and Broadcast Services and staff; the Legislative Library and staff and the Mr. Mike Laffin and the House of Assembly Operations staff.

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## **Appendices**

### **Agency, Board and Commission Appointments**

- Listing of Agency Board and Commission Appointments for the period of October 2004 to September 2005.

### **Nova Scotia Office of the Ombudsman**

- Correspondence regarding confirmation of legal advice received from the Department of Justice prior to meeting with the Committee.

### **Department of Education**

- Information and figures on the Debt Reduction Program.
- A detailed breakdown of the debt loads carried by graduates of Community Colleges, Private Institutions and Universities.

### **Special Education**

- A definition of "gifted Student" and the document entitled, "Challenge for Excellence".
- Provincial data on behavioural studies and suspensions.
- Academic achievements, past and present on the impact of inclusionary practices on educational outcomes.
- Results on School Achievement Indicators Program (SAIP) testing.

### **Council of Nova Scotia University Presidents**

- A copy of the regional study regarding the cost of attending university (Atlantic Omnibus Survey)



AGENCY, BOARD AND COMMISSION  
APPOINTMENTS



**STANDING COMMITTEE ON HUMAN RESOURCES**

**AGENCY, BOARD AND COMMISSION APPOINTMENTS**  
**(October 2004 – September 2005)**

| <b><u>DEPARTMENT</u></b>                                                                                 | <b><u>RANK</u></b> | <b><u>APPROVED</u></b> | <b><u>STOOD</u></b> | <b><u>WITHDRAWN</u></b> |
|----------------------------------------------------------------------------------------------------------|--------------------|------------------------|---------------------|-------------------------|
| <b>DEPARTMENT OF AGRICULTURE AND FISHERIES</b><br>(Agriculture and Marketing, Fisheries and Aquaculture) |                    |                        |                     |                         |
| <b>Farm Loan Board - Nova Scotia</b>                                                                     |                    |                        |                     |                         |
| Leo J. Cox                                                                                               | Chair/Member       | 2005-01-25             |                     |                         |
|                                                                                                          |                    | 2005-02-22             |                     |                         |
| Carol Versteeg                                                                                           | Vice Chair/Member  | 2005-02-22             |                     |                         |
| Victor Moses                                                                                             | Member             | 2005-02-22             |                     |                         |
| <b>Fisheries and Aquaculture Loan Board</b>                                                              |                    |                        |                     |                         |
| Roy J. Surette                                                                                           | Member             | 2005-04-26             |                     |                         |





Standing Committee on Human Resources Annual Report 2004 - 2005

| <u>DEPARTMENT</u>                                                                                           | <u>RANK</u>       | <u>APPROVED</u> | <u>STOOD</u> | <u>WITHDRAWN</u> |
|-------------------------------------------------------------------------------------------------------------|-------------------|-----------------|--------------|------------------|
| <b>DEPARTMENT OF COMMUNITY SERVICES</b><br>(Department of Community Services and the Department of Housing) |                   |                 |              |                  |
| <b>Disabled Persons Commission</b>                                                                          |                   |                 |              |                  |
| M. F. (Mel) Clarke                                                                                          | Commission Member | 2005-03-29      |              |                  |
| William Crawford                                                                                            | Commission Member | 2005-03-29      |              |                  |
| Ralph D. Ferguson                                                                                           | Commission Member | 2005-03-29      |              |                  |
| John T. Kyle                                                                                                | Commission Member | 2005-03-29      |              |                  |
| C. E. (Chuck) Richardson                                                                                    | Commission Member | 2005-03-29      |              |                  |
| Brian Tapper                                                                                                | Commission Member | 2005-03-29      |              |                  |
| H. Jane Warren                                                                                              | Commission Member | 2005-03-29      |              |                  |
| <b>Housing Authorities</b>                                                                                  |                   |                 |              |                  |
| <b>Cape Breton Island</b>                                                                                   |                   |                 |              |                  |
| Alfred Lebevre                                                                                              | Member            | 2005-08-30      |              |                  |
| Hugh MacEachern                                                                                             | Member            | 2005-07-26      |              |                  |
| Frank Sutherland                                                                                            | Member            | 2004-10-26      |              |                  |
| <b>Cobequid</b>                                                                                             |                   |                 |              |                  |
| Mr. Aubrey M. Chapman                                                                                       | Member            | 2005-04-26      |              |                  |
| <b>South Shore</b>                                                                                          |                   |                 |              |                  |
| H. Frederick Bland                                                                                          | Member            | 2005-02-22      |              |                  |
| Andrew Gow                                                                                                  | Member            | 2004-10-26      |              |                  |
| <b>Tri-County</b>                                                                                           |                   |                 |              |                  |
| Theresa Dalton                                                                                              | Member            | 2005-01-25      |              |                  |
| <b>Kings Regional Rehabilitation Centre</b>                                                                 |                   |                 |              |                  |
| Randy Holmesdale                                                                                            | Member            | 2005-09-27      |              |                  |
| <b>Preston Area Housing Fund - Board of Directors</b>                                                       |                   |                 |              |                  |
| Glendon Thomas                                                                                              | Chair/Member      | 2004-12-14      |              |                  |
| <b>Social Workers' Board of Examiners in</b>                                                                |                   |                 |              |                  |
| Richard J. McLanson                                                                                         | Member            | 2005-05-31      |              |                  |

Standing Committee on Human Resources Annual Report 2004 - 2005

| <u>DEPARTMENT</u>                                       | <u>RANK</u>    | <u>APPROVED</u> | <u>STOOD</u> | <u>WITHDRAWN</u> |
|---------------------------------------------------------|----------------|-----------------|--------------|------------------|
| <b>ECONOMIC DEVELOPMENT, OFFICE OF</b>                  |                |                 |              |                  |
| <b>Film Development Corporation Board - Nova Scotia</b> |                |                 |              |                  |
| James Gogan                                             | Director       | 2005-03-29      |              |                  |
| Richard J. Hebb                                         | Director       | 2004-11-30      |              |                  |
| Bonita Kirby                                            | Director       | 2005-03-29      |              |                  |
| Wayne Mason                                             | Director       | 2004-11-30      |              |                  |
| <b>Nova Scotia Liquor Corporation</b>                   |                |                 |              |                  |
| James MacLean                                           | Director       | 2005-08-30      |              |                  |
| Paula Minnikin                                          | Director       | 2005-08-30      |              |                  |
| <b>Waterfront Development Corporation</b>               |                |                 |              |                  |
| Eric F. G. Thompson                                     | Director/Chair | 2004-11-30      |              |                  |
| Ken R. Giffin, CA                                       | Director       | 2004-11-30      |              |                  |
| Brian R. F. Lugar                                       | Director       | 2004-11-30      |              |                  |
| John Needham                                            | Director       | 2004-11-30      |              |                  |

Standing Committee on Human Resources Annual Report 2004 - 2005

| <u>DEPARTMENT</u>                                                  | <u>RANK</u> | <u>APPROVED</u> | <u>STOOD</u> | <u>WITHDRAWN</u> |
|--------------------------------------------------------------------|-------------|-----------------|--------------|------------------|
| <b>DEPARTMENT OF EDUCATION</b>                                     |             |                 |              |                  |
| <b>Acadia University Foundation</b>                                |             |                 |              |                  |
| George Bishop, FCA                                                 | Member      | 2004-10-26      |              |                  |
| John B. Carter                                                     | Member      | 2004-10-26      |              |                  |
| <b>Agricultural College Foundation, Nova Scotia</b>                |             |                 |              |                  |
| Stephen Healy                                                      | Member      | 2005-07-26      |              |                  |
| Richard (Dick) Huggard                                             | Member      | 2005-07-26      |              |                  |
| Sherry E. Porter                                                   | Member      | 2005-07-26      |              |                  |
| <b>College of Art &amp; Design Nova Scotia, Board of Governors</b> |             |                 |              |                  |
| Frank Anderson                                                     | Member      | 2004-11-30      |              |                  |
| Victor Syperek                                                     | Member      | 2004-11-30      |              |                  |
| <b>Colleges and Universities - Nova Scotia Advisory Board on</b>   |             |                 |              |                  |
| Patrick LeGay                                                      | Member      | 2004-12-14      |              |                  |
| Silvana White                                                      | Member      | 2004-12-14      |              |                  |
| <b>Cosmetology - Provincial Examining and Licensing Committee</b>  |             |                 |              |                  |
| Michele LeBlanc                                                    | Member      | 2004-11-30      |              |                  |
| <b>Dalhousie University - Board of Governors</b>                   |             |                 |              |                  |
| Jamie Baillie, CA                                                  | Member      | 2005-03-29      |              |                  |
| Elizabeth Beale                                                    | Member      | 2005-03-29      |              |                  |
| William Black                                                      | Member      | 2005-03-29      |              |                  |
| Robert Chisholm                                                    | Member      | 2005-03-29      |              |                  |
| Hon. Lorne Clark, O.C., Q.C.                                       | Member      | 2005-03-29      |              |                  |
| Murray Coolican                                                    | Member      | 2005-03-29      |              |                  |
| James Cowan, Q. C.                                                 | Member      | 2005-03-29      |              |                  |
| Jay Forbes                                                         | Member      | 2005-03-29      |              |                  |
| Daurene Elaine Lewis                                               | Member      | 2005-03-29      |              |                  |
| Don Mills                                                          | Member      | 2005-03-29      |              |                  |
| Dr. Alasdair MacLean Sinclair                                      | Member      | 2005-03-29      |              |                  |
| Dr. Jim Spatz                                                      | Member      | 2005-03-29      |              |                  |
| Bruce L. Towler, FCA                                               | Member      | 2005-03-29      |              |                  |

Standing Committee on Human Resources Annual Report 2004 - 2005

**Dalhousie University Foundation**

|                      |        |            |
|----------------------|--------|------------|
| Cathy MacNutt        | Member | 2005-05-31 |
| Charlotte Sutherland | Member | 2005-05-31 |
| Thomas Traves        | Member | 2005-05-31 |
| Karen Woolhouse      | Member | 2005-05-31 |

**Johnstone (Dr. P. Anthony) Memorial  
Fund Entrance Scholarship**

|              |        |            |
|--------------|--------|------------|
| Janet Murphy | Member | 2005-08-30 |
| Wanda Robson | Member | 2005-08-30 |

**Library Boards**

**Cumberland**

|             |        |            |
|-------------|--------|------------|
| Paul Hopper | Member | 2005-09-27 |
| Sara MacRae | Member | 2005-09-27 |

**East Hants**

|               |        |            |
|---------------|--------|------------|
| Rob Landry    | Member | 2005-07-26 |
| Ruby McDorman | Member | 2005-07-26 |

**Halifax Regional**

|              |        |            |
|--------------|--------|------------|
| Shawn Cleary | Member | 2005-05-31 |
| Betty Thomas | Member | 2005-05-31 |

**South Shore**

|               |        |            |
|---------------|--------|------------|
| Clara Dugas   | Member | 2005-04-26 |
| Debra MacLean | Member | 2005-04-26 |

**Western Counties**

|                |        |            |
|----------------|--------|------------|
| Gary Archibald | Member | 2005-04-26 |
|----------------|--------|------------|

**Provincial Apprenticeship Board**

|                    |        |            |
|--------------------|--------|------------|
| Gerald L. Cormier  | Member | 2005-06-28 |
| Graham Baxter      | Member | 2005-04-26 |
| Gordon Giffin, Jr. | Member | 2005-04-26 |

**Saint Mary's University - Board of  
Governors**

|                     |        |            |
|---------------------|--------|------------|
| John S. Fitzpatrick | Member | 2004-12-14 |
| R. Larry Hood       | Member | 2004-12-14 |

Standing Committee on Human Resources Annual Report 2004 - 2005

**St. Francis Xavier University  
Foundation**

Iain Daniel Boyd  
Mary J. Coyle

Member  
Member

2004-10-26  
2004-10-26

**Teachers College Foundation, Board of  
Governors**

John N. Grant  
Gordon Jeffery  
Donna MacDonald  
David White

Member  
Member  
Member  
Member

2005-09-27  
2005-09-27  
2005-09-27  
2005-09-27

**Youth Advisory Council**

Sarah Lefurgey  
Ashley Smith

Member  
Member

2005-01-25  
2005-01-25



Standing Committee on Human Resources Annual Report 2004 - 2005

**DEPARTMENT**  
**DEPARTMENT OF ENVIRONMENT AND**  
**LABOUR**

(Department of Environment and  
Department of Labour)

**RANK**

**APPROVED**

**STOOD**

**WITHDRAWN**

**Crane Operators Examination  
Committee**

|                  |                                      |            |
|------------------|--------------------------------------|------------|
| Roderick L. Kerr | Member (representing Crane<br>Owner) | 2005-05-31 |
| Malcolm MacLeod  | Member (representing Crane<br>Owner) | 2005-05-31 |

**Fuel Safety Advisory Board**

|                       |              |            |
|-----------------------|--------------|------------|
| Frederick L. Chalmers | Member/Chair | 2004-11-30 |
| Winston Burke         | Member       | 2005-02-22 |
| Marjorie Davison      | Member       | 2004-11-30 |
| Harvey Fedyk          | Member       | 2005-02-22 |
| Arthur Irwin          | Member       | 2004-11-30 |
| John McCormack        | Member       | 2005-02-22 |
| Colleen Rollings      | Member       | 2004-11-30 |
| Robert Sampson        | Member       | 2004-11-30 |
| James D. Wilkie       | Member       | 2005-02-22 |

**Minimum Wage Review Committee**

|                   |                         |            |
|-------------------|-------------------------|------------|
| Rick Clarke       | Employee Representative | 2004-10-26 |
| Steven MacPherson | Employer Representative | 2004-10-26 |
| Thomas Patterson  | Employee Representative | 2004-10-26 |
| Sandra Rodd       | Employer Representative | 2004-10-26 |

**Occupational Health and Safety  
Advisory Council**

|                                 |                                |            |
|---------------------------------|--------------------------------|------------|
| Joel Marsman                    | Member (Employer)              | 2005-04-26 |
| Kevin Beaton, P.Eng.            | Member (Alternate<br>Employer) | 2005-04-26 |
| David F. J. Davis, P.Eng., CRSP | Member (Alternate<br>Employer) | 2005-04-26 |
| Sheldon Andrews                 | Member (Employee)              | 2005-04-26 |
| Betty Jean Sutherland           | Member (Employee)              | 2005-04-26 |
| Dave Hindle                     | Member (Alternate<br>Employee) | 2005-04-26 |
| Maureen Pickup                  | Member (Alternate<br>Employee) | 2005-04-26 |
| Daniel L. Wagner                | Member (representing<br>Owner) | 2005-05-31 |

**Resource Recovery Fund Board**

|                  |        |            |
|------------------|--------|------------|
| Gerard MacLellan | Member | 2004-12-14 |
|------------------|--------|------------|

Standing Committee on Human Resources Annual Report 2004 - 2005

**Workers' Compensation Board -**

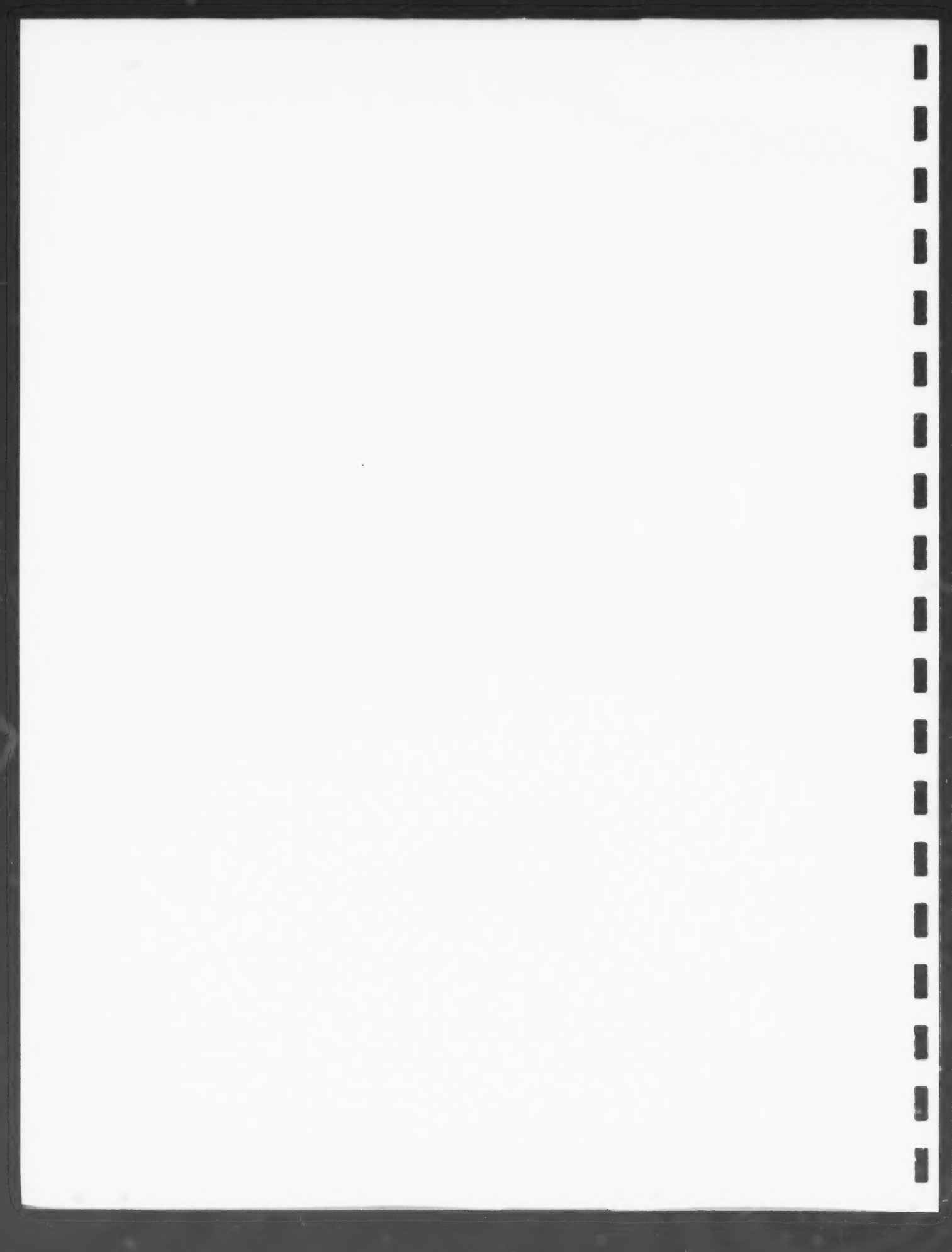
**Members**

|                  |                         |            |
|------------------|-------------------------|------------|
| Janet Hazelton   | Employee Representative | 2005-07-26 |
| Mary Lloyd       | Employee Representative | 2005-07-26 |
| Carol MacCulloch | Employer Representative | 2005-07-26 |
| Archie MacKeigan | Employer Representative | 2005-07-26 |
| Deborah A. Ryan  | Employee Representative | 2005-07-26 |
| David W. Thomson | Employer Representative | 2005-07-26 |



Standing Committee on Human Resources Annual Report 2004 - 2005

| <u>DEPARTMENT</u>                          | <u>RANK</u>  | <u>APPROVED</u> | <u>STOOD</u> | <u>WITHDRAWN</u> |
|--------------------------------------------|--------------|-----------------|--------------|------------------|
| <b>DEPARTMENT OF FINANCE</b>               |              |                 |              |                  |
| <b>Gaming Corporation - Nova Scotia</b>    |              |                 |              |                  |
| C. Sean O'Connor, CA                       | Chair/Member | 2005-01-25      |              |                  |
| Peter Gerard Fardy, MBA                    | Member       | 2005-01-25      |              |                  |
| <b>Halifax-Dartmouth Bridge Commission</b> |              |                 |              |                  |
| Tom Calkin                                 | Chair/Member | 2005-02-22      |              |                  |
| I. David Covill                            | Member       | 2005-02-22      |              |                  |
| Wayne Mason                                | Member       | 2005-03-29      |              |                  |
| Clinton E. Schofield                       | Member       | 2005-02-22      |              |                  |



Standing Committee on Human Resources Annual Report 2004 - 2005

| <u>DEPARTMENT</u>                    | <u>RANK</u>  | <u>APPROVED</u> | <u>STOOD</u> | <u>WITHDRAWN</u> |
|--------------------------------------|--------------|-----------------|--------------|------------------|
| <b>DEPARTMENT OF HEALTH</b>          |              |                 |              |                  |
| <b>AIDS, Advisory Commission on</b>  |              |                 |              |                  |
| Larry Baxter                         | Member/Chair | 2004-10-26      |              |                  |
| Barbara Clow                         | Member       | 2005-05-31      |              |                  |
| Thelma Coward-Ince                   | Member       | 2004-12-14      |              |                  |
| Margaret Dwyer                       | Member       | 2005-02-22      |              |                  |
| Pamela Fry                           | Member       | 2005-02-22      |              |                  |
| Terry Goodwin                        | Member       | 2004-10-26      |              |                  |
| William Hart, Ph.D.                  | Member       | 2005-02-22      |              |                  |
| Dorothy Malcom                       | Member       | 2004-12-14      |              |                  |
| Shannon Taylor                       | Member       | 2005-02-22      |              |                  |
| <b>Dispensing Opticians Board</b>    |              |                 |              |                  |
| Thomas Burlock                       | Member       | 2005-04-26      |              |                  |
| Gregory Gillam                       | Member       | 2005-04-26      |              |                  |
| Marion Landers                       | Member       | 2005-04-26      |              |                  |
| Lorne Ostrov                         | Member       | 2005-04-26      |              |                  |
| <b>Health Authority Districts</b>    |              |                 |              |                  |
| <b>District 1 - South Shore</b>      |              |                 |              |                  |
| Christopher Clarke                   | Member       | 2005-09-27      |              |                  |
| Walter Freeman                       | Member       | 2005-09-27      |              |                  |
| Dr. David Large                      | Member       | 2005-09-27      |              |                  |
| Doug Nauss                           | Member       | 2005-09-27      |              |                  |
| Dawn Payzant                         | Member       | 2005-09-27      |              |                  |
| <b>District 2 - South West Nova</b>  |              |                 |              |                  |
| Tim Alison                           | Member       | 2005-05-31      |              |                  |
| Brian Coker                          | Member       | 2005-02-22      |              |                  |
| James Goodwin                        | Member       | 2005-09-27      |              |                  |
| <b>District 3 - Annapolis Valley</b> |              |                 |              |                  |
| Michael Coyle, LL.B., P.Ag.          | Member       | 2005-09-27      |              |                  |
| John Gallivan                        | Member       | 2005-09-27      |              |                  |
| Steve Hemenway                       | Member       | 2005-09-27      |              |                  |
| Shanthi Johnson                      | Member       | 2005-09-27      |              |                  |

Standing Committee on Human Resources Annual Report 2004 - 2005

**District 4 - Colchester East Hants**

|                    |        |            |
|--------------------|--------|------------|
| Ken Curren         | Member | 2005-09-27 |
| Anne DeAdder       | Member | 2005-09-27 |
| Nora Jessome       | Member | 2005-09-27 |
| Sherry Lavers      | Member | 2005-09-27 |
| John MacDonald     | Member | 2005-09-27 |
| Charlene McCulloch | Member | 2005-09-27 |

**District 5 - Cumberland**

|                 |        |            |
|-----------------|--------|------------|
| Karen Dickinson | Member | 2005-09-27 |
| Nancy McLelan   | Member | 2005-09-27 |
| Ron Scott       | Member | 2005-09-27 |
| Doris Soley     | Member | 2005-09-27 |

**District 6 - Pictou County**

|             |        |            |
|-------------|--------|------------|
| Ed Bowden   | Member | 2005-09-27 |
| Travis Gunn | Member | 2005-09-27 |
| Joe Whalen  | Member | 2005-09-27 |

**District 7 - Guysborough, Antigonish, Strait**

|                 |        |            |
|-----------------|--------|------------|
| Keith Gallant   | Member | 2004-11-30 |
| Sharon MacInnis | Member | 2005-09-27 |
| Rob Ryan        | Member | 2005-09-27 |
| David Samson    | Member | 2005-09-27 |

**District 8 - Cape Breton**

|                  |              |            |
|------------------|--------------|------------|
| Norman Connors   | Chair/Member | 2005-09-27 |
| Yann Artur       | Member       | 2005-09-27 |
| Richard Gwinn    | Member       | 2005-09-27 |
| Yvon LeBlanc     | Member       | 2005-09-27 |
| George Wheeliker | Member       | 2005-09-27 |

**District 9 - Capital Region**

|               |              |            |
|---------------|--------------|------------|
| Armand Pinard | Chair/Member | 2005-09-27 |
| Don Ferguson  | Member       | 2005-09-27 |
| Linda Garber  | Member       | 2005-09-27 |
| Larry Horton  | Member       | 2005-09-27 |
| Don Stewart   | Member       | 2005-09-27 |
| Tina Tucker   | Member       | 2005-09-27 |

**Health Research Foundation - Nova Scotia**

|                 |        |            |
|-----------------|--------|------------|
| Maureen Summers | Member | 2005-02-22 |
|-----------------|--------|------------|

Standing Committee on Human Resources Annual Report 2004 - 2005

**Nurses (Licensed Practical) College**

|             |        |            |
|-------------|--------|------------|
| Fred Beaton | Member | 2005-02-22 |
|-------------|--------|------------|

**Optometry - Board of Examiners**

|                      |        |            |
|----------------------|--------|------------|
| Dr. Andrea Hawkins   | Member | 2005-02-22 |
| Dr. Sheldon Pothier  | Member | 2005-02-22 |
| Dr. Timothy Winslade | Member | 2005-02-22 |

**Pharmacists, Nova Scotia College of**

|                     |            |            |
|---------------------|------------|------------|
| Franklyn Burgoyne   | Councillor | 2004-11-30 |
| Tom Mahaffey        | Councillor | 2005-02-22 |
| Jean Mary McDougall | Councillor | 2004-11-30 |

**Physicians and Surgeons of Nova Scotia - Council of the College of**

|              |        |            |
|--------------|--------|------------|
| Douglas Lloy | Member | 2004-10-26 |
|--------------|--------|------------|

**Prescription Monitoring Board, Nova Scotia**

|                   |        |            |
|-------------------|--------|------------|
| Dr. Marco Chiarot | Member | 2005-06-28 |
| Patrick King      | Member | 2005-06-28 |
| Ruth Shea         | Member | 2005-06-28 |
| Ronald Surette    | Member | 2005-06-28 |
| Dr. Rodney Wilson | Member | 2005-06-28 |

**Provincial Dental Board**

|                    |        |            |
|--------------------|--------|------------|
| Kore-Lee Cormier   | Member | 2004-12-14 |
| Odette d'Eon       | Member | 2004-12-14 |
| Dr. John Miller    | Member | 2004-12-14 |
| Dr. Andrew Nette   | Member | 2004-12-14 |
| Dwight Rudderham   | Member | 2004-12-14 |
| Dr. Andrew Stewart | Member | 2004-12-14 |
| Angela Worsley     | Member | 2004-12-14 |

**Queen Elizabeth II Health Sciences Centre (and Nova Scotia Hospital)**

|               |              |            |
|---------------|--------------|------------|
| Armand Pinard | Chair/Member | 2005-09-27 |
| Don Ferguson  | Member       | 2005-09-27 |
| Linda Garber  | Member       | 2005-09-27 |
| Larry Horton  | Member       | 2005-09-27 |
| Don Stewart   | Member       | 2005-09-27 |
| Tina Tucker   | Member       | 2005-09-27 |

Standing Committee on Human Resources Annual Report 2004 - 2005

| <u>DEPARTMENT</u>                     | <u>RANK</u>  | <u>APPROVED</u> | <u>STOOD</u> | <u>WITHDRAWN</u> |
|---------------------------------------|--------------|-----------------|--------------|------------------|
| <b>HEALTH PROMOTIONS, OFFICE OF</b>   |              |                 |              |                  |
| <b>Boxing Authority, Nova Scotia</b>  |              |                 |              |                  |
| Mickey MacDonald                      | Chair/Member | 2005-05-31      |              |                  |
| Ricky Anderson                        | Member       | 2005-02-22      |              |                  |
| David Grace                           | Member       | 2005-02-22      |              |                  |
| Wayne Reynolds                        | Member       | 2004-10-26      |              |                  |
| Walter Stewart                        | Member       | 2004-10-26      |              |                  |
| <b>Gaming Foundation, Nova Scotia</b> |              |                 |              |                  |
| Jim MacCormack                        | Member       | 2005-07-26      |              |                  |
| Jack Novack                           | Member       | 2005-07-26      |              |                  |
| Theresa O'Leary                       | Member       | 2005-07-26      |              |                  |
| Tracy Schrans                         | Member       | 2005-07-26      |              |                  |
| Dave Whiting                          | Member       | 2005-07-26      |              |                  |

Standing Committee on Human Resources Annual Report 2004 - 2005

| <u>DEPARTMENT</u>                                              | <u>RANK</u>        | <u>APPROVED</u> | <u>STOOD</u> | <u>WITHDRAWN</u> |
|----------------------------------------------------------------|--------------------|-----------------|--------------|------------------|
| <b>DEPARTMENT OF JUSTICE</b>                                   |                    |                 |              |                  |
| <b>Human Rights Commission, Nova Scotia</b>                    |                    |                 |              |                  |
| Ernest Bolivar                                                 | Commissioner/Chair | 2005-07-26      |              |                  |
| Ron Dawson                                                     | Commissioner       | 2005-02-22      |              |                  |
| Prem Dhir                                                      | Commissioner       | 2005-06-28      |              |                  |
| Louis A. Gannon, Jr.                                           | Commissioner       | 2005-08-30      |              |                  |
| Lance R. Hale                                                  | Commissioner       | 2005-08-30      |              |                  |
| Robert Hannigan                                                | Commissioner       |                 | 2005-06-28   |                  |
| Eunice Harker                                                  | Commissioner       | 2005-02-22      |              |                  |
| Sister Dorothy Moore, C.S.M.                                   | Commissioner       | 2005-08-30      |              |                  |
| David Samson                                                   | Commissioner       | 2004-11-30      | 2004-10-26   |                  |
| Narayana Swamy                                                 | Commissioner       | 2005-05-31      |              |                  |
| <b>Judicial Appointments, Advisory Committee on Provincial</b> |                    |                 |              |                  |
| Gwen Haliburton                                                | Member             |                 | 2004-10-26   | 2004-11-30       |
| Robert S. Wright                                               | Member             | 2004-10-26      |              |                  |
| <b>Legal Aid Commission, Nova Scotia</b>                       |                    |                 |              |                  |
| Shanta Dhir                                                    | Director           | 2004-10-26      |              |                  |
| Frank G. Gillis, QC                                            | Director           | 2004-11-30      | 2004-10-26   |                  |
| Vincent Bernard MacDonald                                      | Director           | 2004-10-26      |              |                  |
| <b>Police Commissioners - Municipal Boards</b>                 |                    |                 |              |                  |
| <b>Annapolis</b>                                               |                    |                 |              |                  |
| Rion Microys                                                   | Member             | 2005-05-31      |              |                  |
| <b>Kentville</b>                                               |                    |                 |              |                  |
| George C. Sweet                                                | Member             | 2004-10-26      |              |                  |
| Allan Bruce                                                    | Member             | 2005-01-25      |              |                  |
| <b>New Glasgow</b>                                             |                    |                 |              |                  |
| Edward Teiman                                                  | Member             | 2005-05-31      |              |                  |
| <b>Westville</b>                                               |                    |                 |              |                  |
| Dorothy Lane Hale                                              | Member             | 2005-05-31      |              |                  |

Standing Committee on Human Resources Annual Report 2004 - 2005

**Police Commission, Nova Scotia**

|                    |              |            |
|--------------------|--------------|------------|
| Nadine Cooper Mont | Chair/Member | 2004-10-26 |
| Paul D. Gates      | Member       | 2004-10-26 |
| Dr. Daniel N. Paul | Member       | 2004-10-26 |
| Betty Thomas       | Member       | 2004-10-26 |
| Ross Gordon Wagg   | Member       | 2004-10-26 |



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|--------------------------------------------|--------------|-----------------|--------------|------------------|
| <b>DEPARTMENT OF NATURAL<br/>RESOURCES</b> |              |                 |              |                  |
| <b>Shubenacadie Canal Commission</b>       |              |                 |              |                  |
| Keith S. Manchester                        | Commissioner | 2005-06-28      |              |                  |
| John F. O'Connor, M.D.                     | Commissioner | 2005-06-28      |              |                  |
| Darren Schives                             | Commissioner | 2005-06-28      |              |                  |

Standing Committee on Human Resources Annual Report 2004 - 2005

DEPARTMENT  
**PUBLIC SERVICE COMMISSION**

RANK

APPROVED

STOOD

WITHDRAWN

**Status of Women, Advisory Council on  
the**

|                        |        |            |  |  |
|------------------------|--------|------------|--|--|
| Linda Carvery, D.Litt. | Member | 2005-09-27 |  |  |
| Liz Chisholm           | Member | 2005-09-27 |  |  |
| Ebi Cocodia            | Member | 2005-09-27 |  |  |
| Shelley Goodwin        | Member | 2005-09-27 |  |  |
| Anne Kelly             | Member | 2005-09-27 |  |  |
| Patricia LeBlanc       | Member | 2005-09-27 |  |  |
| Holly Meuse            | Member | 2005-09-27 |  |  |
| Doreen Paris           | Member | 2005-09-27 |  |  |

Standing Committee on Human Resources Annual Report 2004 - 2005

| <b><u>DEPARTMENT</u></b>                                                                                                                      | <b><u>RANK</u></b> | <b><u>APPROVED</u></b> | <b><u>STOOD</u></b> | <b><u>WITHDRAWN</u></b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------|---------------------|-------------------------|
| <b>SERVICES NOVA SCOTIA AND MUNICIPAL RELATIONS</b><br>(Department of Business and Consumer Services and the Department of Municipal Affairs) |                    |                        |                     |                         |
| <b>Certified General Accountants Association of Nova Scotia</b>                                                                               |                    |                        |                     |                         |
| Gregg W. Knudsen                                                                                                                              | Member             | 2005-01-25             |                     |                         |
| Lantz H. Siteman                                                                                                                              | Member             | 2005-01-25             |                     |                         |
| <b>Embalmers &amp; Funeral Directors - Board of Registration</b>                                                                              |                    |                        |                     |                         |
| Dennis E. Haverstock                                                                                                                          | Member             | 2005-04-26             |                     |                         |
| <b>Municipal Finance Corporation, Nova Scotia</b>                                                                                             |                    |                        |                     |                         |
| James E. Radford                                                                                                                              | Director           | 2004-10-26             |                     |                         |
| <b>Real Estate Appraisers Association Board of Directors</b>                                                                                  |                    |                        |                     |                         |
| Valerie A. Folk                                                                                                                               | Member             | 2005-01-25             |                     |                         |
| Douglas C. McNeil                                                                                                                             | Member             | 2005-01-25             |                     |                         |
| <b>Real Estate Commission, Nova Scotia</b>                                                                                                    |                    |                        |                     |                         |
| Howard Oakey                                                                                                                                  | Member             | 2005-08-30             |                     |                         |
| Hobartson Augustus James Wedderburn                                                                                                           | Member             | 2005-04-26             |                     |                         |

Standing Committee on Human Resources Annual Report 2004 - 2005

| <u>DEPARTMENT</u>                                      | <u>RANK</u>  | <u>APPROVED</u> | <u>STOOD</u> | <u>WITHDRAWN</u> |
|--------------------------------------------------------|--------------|-----------------|--------------|------------------|
| <b>DEPARTMENT OF TOURISM AND CULTURE</b>               |              |                 |              |                  |
| <b>Art Gallery of Nova Scotia - Board of Governors</b> |              |                 |              |                  |
| Linda Pirard                                           | Governor     | 2004-10-26      |              |                  |
| <b>Nova Scotia Museum Board of Governors</b>           |              |                 |              |                  |
| Archie McCulloch                                       | Member       | 2004-10-26      |              |                  |
| Sandra Nowlan, M.Sc.                                   | Member       | 2004-10-26      |              |                  |
| Rudolph Stea                                           | Member       | 2004-10-26      |              |                  |
| James St. Clair                                        | Member       | 2004-10-26      |              |                  |
| <b>Peggy's Cove Commission</b>                         |              |                 |              |                  |
| Murray Garrison                                        | Chair/Member | 2005-04-26      |              |                  |
| David G. Parkes                                        | Member       | 2005-04-26      |              |                  |
| <b>Public Archives, Board of Trustees</b>              |              |                 |              |                  |
| William Hastings Laurence                              | Member       | 2005-05-31      |              |                  |
| Dr. Bridglal Pachai                                    | Member       | 2005-05-31      |              |                  |
| <b>Sherbrooke Restoration Commission</b>               |              |                 |              |                  |
| Judith F. Jollota                                      | Commissioner | 2004-12-14      |              |                  |

Standing Committee on Human Resources Annual Report 2004 - 2005

**DEPARTMENT**  
**TREASURY & POLICY BOARD**

**RANK**

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**Voluntary Planning Board, Nova Scotia**

|                                 |                     |            |
|---------------------------------|---------------------|------------|
| Dr. Teresa MacNeil              | Director/Vice Chair | 2005-02-22 |
| Dr. J. Colin Dodds              | Director            | 2005-02-22 |
| Suzanne Elizabeth Drapeau       | Director            | 2005-05-31 |
| J. D. (Jim) Eisenhauer, P. Eng. | Director            | 2005-02-22 |
| Mayann Francis                  | Director            | 2005-05-31 |
| James B. Henley                 | Director            | 2005-02-22 |
| Rick MacDonald                  | Director            | 2005-05-31 |
| Dr. Daniel MacInnes             | Director            | 2005-02-22 |
| Malcolm Shookner                | Director            | 2005-02-22 |
| Louis Tousignant                | Director            | 2005-02-22 |

NOVA SCOTIA OFFICE  
OF THE OMBUDSMAN



**Legislative  
Committees Office**

House of Assembly  
Nova Scotia

3rd Floor, Dennis Building  
1740 Granville Street  
PO Box 2630, Station M  
Halifax, Nova Scotia  
B3J 3N5

February 7, 2005

Mr. Dwight Bishop  
Ombudsman  
Office of the Ombudsman  
Suite 700, 5670 Spring Garden Road  
P.O. Box 2152  
Halifax, NS

Dear Mr. Bishop:

The Standing Committee on Human Resources would again, like to thank you and Ms. Vandervoort for meeting with them on February 1, 2005.

As a follow-up to that meeting the committee had requested that you endeavour to provide them, in writing, confirmation of what the Department of Justice Counsel has advised you on prior to meeting the Human Resources Committee. (See pages 25 - 28 of the enclosed transcript)

Enclosed are several copies of the Hansard transcript. Should you require further copies, please do not hesitate to contact me.

Sincerely,

Darlene Henry  
Committee Clerk

Encl. 3



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contains recycled fibre



Office of  
the Ombudsman

PO Box 2152  
Halifax, Nova Scotia  
B3J 3B7

Bus 902 424-6780  
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Toll free 1 (800) 670-1111

April 5, 2005

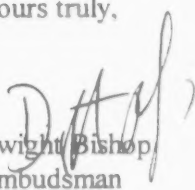
Mr. Ronald Chisholm, MLA  
Chair  
Standing Committee on Human Resources  
c/o Committee's Office  
Dennis Building  
Halifax, NS

Dear Mr. Chisholm:

As you may recall during the Committee hearing on February 1, 2005, I undertook to provide the Committee with the legal basis for my initial reluctance to address certain questions because of perceived confidentiality considerations arising from Section 24 of the Civil Service Disclosure of Wrongdoing Regulations. We have now had occasion to review this matter with the Department of Justice and enclose for your information recent exchanges of correspondence. As indicated in the Department of Justice's reply, solicitor client privilege precludes me from accessing the document/discussion which provided the basis for my initial position. I am therefore unable to fulfil my original undertaking.

I apologize for not being able to access this documentation; and thank the Committee for their patience during my appearance. As stated, after some reflection, during the Committee hearing, I believe Section 24 of the Civil Service Disclosure of Wrongdoing is not designed to prevent this office from providing procedural information regarding this Office's enforcement of the regulations.

Yours truly,

  
Dwight Bishop  
Ombudsman

DB /mls  
Encls.



DEPARTMENT OF  
EDUCATION



April 1, 2005

Ms. Darlene Henry  
Legislative Committees Office  
House of Assembly  
1740 Granville St.  
P.O. Box 2630, Station M  
Halifax, NS B3J 3N5

Dear Ms. Henry:

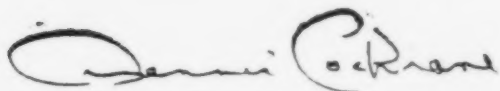
I am in receipt of your memo of February 28, 2005, in which you request additional information from the Student Assistance Office with respect to debt-reduction on behalf of the Standing Committee on Human Resources.

Officials from NSSAO inform me that every effort has been made to contact potential debt-reduction award recipients for the 2003/04 academic year with e-mails sent to 3,200 students and letters and applications mailed to them in May, 2004. In addition, NSSAO is in the process of sending a second letter to eligible students who have not applied for debt reduction. As of March 23, 2005, approximately 1,700 applications for debt-reduction have been processed and \$888,640 issued. NSSAO is now in the process of identifying potential award recipients for the 2004/05 academic year and e-mails and letters will be sent to them in early April of 2005.

For a detailed breakdown of the kind of debt loans carried by graduates of Community Colleges, Private Institutions, Universities, etc., please view the attached document. Please note this reflects only Nova Scotia loan balances as the Province does not have access to other statistics.

If you require any further information or assistance, please do not hesitate to ask.

Yours truly,



Dennis Cochrane  
Deputy Minister

Attachment

# **Nova Scotia Student Loan Portfolio (Risk Shared and Guaranteed)**

**Average Loan Sizes - based on initial principal moving into Repayment**

| Cohort Year | Universities |                           |                   | Colleges   |                           |                   | Private Schools |                           |                   | Total      |                           |                   |
|-------------|--------------|---------------------------|-------------------|------------|---------------------------|-------------------|-----------------|---------------------------|-------------------|------------|---------------------------|-------------------|
|             | # of Loans   | Princ \$ at Consolidation | Average Loan Size | # of Loans | Princ \$ at Consolidation | Average Loan Size | # of Loans      | Princ \$ at Consolidation | Average Loan Size | # of Loans | Princ \$ at Consolidation | Average Loan Size |
| 1997        | 938          | \$ 4,246,308              | \$ 4,527          | 339        | \$ 989,642                | \$ 2,919          | 292             | \$ 1,037,087              | \$ 3,552          | 1,569      | \$ 6,273,037              | \$ 3,998          |
| 1998        | 2,090        | \$ 10,868,090             | \$ 5,200          | 1,098      | \$ 3,106,003              | \$ 2,829          | 837             | \$ 3,110,736              | \$ 3,717          | 4,025      | \$ 17,084,829             | \$ 4,245          |
| 1999        | 4,937        | \$ 30,648,118             | \$ 6,208          | 2,611      | \$ 3,684,283              | \$ 1,411          | 2,270           | \$10,167,177              | \$ 4,479          | 9,818      | \$ 44,499,578             | \$ 4,532          |
| 2000        | 4,237        | \$ 16,848,613             | \$ 3,977          | 1,498      | \$ 4,893,184              | \$ 3,266          | 1,737           | \$ 6,956,627              | \$ 4,005          | 7,472      | \$ 28,698,423             | \$ 3,841          |
| 2001        | 3,979        | \$ 20,103,989             | \$ 5,053          | 1,345      | \$ 4,528,344              | \$ 3,367          | 1,472           | \$ 6,545,918              | \$ 4,447          | 6,796      | \$ 31,178,251             | \$ 4,588          |
| 2002        | 4,175        | \$ 23,395,055             | \$ 5,604          | 1,268      | \$ 4,849,926              | \$ 3,825          | 1,388           | \$ 6,837,485              | \$ 4,926          | 6,831      | \$ 35,082,466             | \$ 5,136          |
| 2003        | 4,525        | \$ 25,733,804             | \$ 5,687          | 1,228      | \$ 4,733,315              | \$ 3,854          | 1,284           | \$ 7,085,727              | \$ 5,518          | 7,037      | \$ 37,552,845             | \$ 5,336          |
| 2004        | 4,398        | \$ 27,866,913             | \$ 6,336          | 1,226      | \$ 5,566,124              | \$ 4,540          | 1,198           | \$ 7,017,078              | \$ 5,857          | 6,822      | \$ 40,450,115             | \$ 5,929          |

Notes :

Values shown reflect NS Student Loan balances only.

The province does not have access to Canada Student Loan data at a detailed level.

The Average CSLP balance known (2002/03) was \$ 7,852.81

NS loan balances are prior to application of NS Debt Reduction since the program has just begun.

SPECIAL  
EDUCATION



JUL 8 2005

Mr. Ron Chisholm, MLA  
Chairman  
Standing Committee on Human Resources  
3<sup>rd</sup> Floor Dennis Building  
1740 Granville Street  
Halifax, NS B3J 1X5

Dear Mr. Chisholm:

I am writing to forward the additional information I agreed to provide the Standing Committee on Human Resources when I met with the Committee on May 31, 2005.

During the meeting, I promised to provide a definition of giftedness. Please find enclosed a copy of the document I referred to when responding to Mr. O'Donnell (*Challenge for Excellence: Enrichment and Gifted Education Resource Guide*). On page 15 of this document we define the term gifted. "The term 'gifted' refers to students who give evidence of outstanding performance capability in areas such as intellectual, creative, artistic, or leadership, or in specific academic fields." The section of this document on the identification process (pages 11-26) will further support the definition of giftedness.

On May 31, 2005, we discussed provincial data relating to behavioural incident and suspensions. At the time I referred to the Behaviour Incident Tracking Form, a copy of which I am enclosing with this correspondence. This tracking form is a critical component of our implementation of the Code of Conduct and Guidelines. To support implementation we are providing intensive professional development to all schools in the province. We are inservicing 100 schools per year over the next four years as part of Positive and Effective Behaviour Supports (PEBS); use of this form is part of this professional development. PEBS helps schools to address behaviour concerns. The collection, analysis, and appropriate use of school incident data is a fundamental component of PEBS. Using the Behaviour Incident Tracking Form will result in the collection, reporting, and summarizing of data from all office referrals. This data will inform decision making concerning effective behavioural support in schools. At both the school and board level, aggregate data will assist in planning for effective prevention and intervention programming for students as well as professional development activities. It will also provide information, provincially, on the effectiveness of the implementation and interventions at school level.

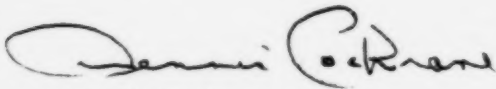
During my presentation before the Committee, I agreed to forward research findings relating to the academic achievement of all students in inclusionary classroom settings. Please find enclosed two examples of recent research in this area. The research findings indicate that achievement of students without disabilities was not adversely affected, and may even be enhanced, by

.../2

inclusionary practices. The studies I am referencing are by Henk Deneris, Anne Jordan and Ruth Childs of the Ontario Institute for Studies in Education, University of Toronto, January 26, 2005, and The Impact of Inclusion on Students With and Without Disabilities and Their Educators by Spencer J. Salend and Laurel M. Garrick Duhaney found in Remedial and Special Education, Volume 20, Numbr 2, March/April 1999, Pages 114-126.

With regard to the national assessment known as the School Achievement Indicators Program (SAIP), I am enclosing SAIP Math Results (2001) (Math Content and Problem Solving), Science Results (2004), and Writing Results (2002). SAIP is not administered at a grade level but rather it is conducted with two age groups - 13 and 16 year olds. Both age groups write the exact same assessment. Because of the varying range of grade levels that these age groups are found in from one jurisdiction to another, it is more accurate to make comparisons where students have had the fullest opportunity to learn. Therefore, I have included the comparative results for 16 year olds only. It must be pointed out that internationally, Nova Scotia achievement is ranked higher than a majority of OECD countries. It should also be noted there are a variety of contextual factors which must be considered when analysing data from any international assessment (e.g., student drop out rates).

Yours truly,

A handwritten signature in dark ink, appearing to read "Dennis Cochrane". The signature is fluid and cursive, with the first name "Dennis" written in a larger, more prominent script than the last name "Cochrane".

Dennis Cochrane  
Deputy Minister

Enclosures



# Challenge for Excellence

---

Enrichment and Gifted Education  
Resource Guide

Challenge for Excellence: Enrichment and Gifted Education Resource Guide

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Prepared by the Department of Education

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## Introduction

... Society gains from the advancement of all abilities and from the highest development of all its members, whatever their strengths. That which nurtures and actualizes each individual nourishes us as a society

(Clark 1992)



# Introduction

The rationale for developing and implementing programming for students with gifts and talents can be drawn from the Department of Education and Culture's *Public School Programs: 1998-99*—

...Fundamental changes are occurring in the world. The economy is becoming more diversified and is placing a greater emphasis on information-based enterprises, global competitiveness and sustainable development. Society is becoming more diverse in family structure, language, culture, values and perspectives. There is a growing awareness of global interdependence among peoples and nations. Nova Scotia's future is becoming more reliant upon partnerships and collaboration ... in this changing environment, all children in Nova Scotia need a broad based, quality education. Quality in education is demonstrated by the excellence of individual courses, programs and shared experiences. Quality is also demonstrated by the diversity of educational experiences in which students are actively involved and by the extent to which individual student's needs are met.

While the educational system strives to provide and facilitate a wide range of educational experiences and opportunities, there are students who require extended challenges in order to meet their full potential. Winebrenner and Devlin (1994) note that students with gifts and talents need exactly what all other students need, "consistent opportunity to learn new material and to develop the behaviours that allow them to cope with the challenge and struggle of new learning." Alternative program planning is as important for gifted students as it is for any student with special needs.

Underachievement among gifted students is a major challenge with which educators must come to terms. Being a "gifted student" and being a "school drop-out" appear as contradictory terms. Yet students with gifts and talents do form a segment of the school drop-out population. Even gifted students who appear to be achieving may not be sufficiently challenged in terms of reaching their potential or developing and extending their learning. "Before placing blame on students, it is best to look also at the curriculum with which they are presented. Perhaps in the final analysis underachievement is learned because it is taught so well, and so often" (Delisle 1992).



Being a "gifted student" and being a "school drop-out" appear as contradictory terms. Yet gifted students do form a significant segment of the school drop-out population.

(Delisle 1992)

With appropriate program planning, the possibility for a gifted student to reach his/her potential increases. Providing programs and services for students with gifts and talents requires planning at each level of the school system. The purpose of this guide is to assist school boards in developing programs and services for students with gifts and talents in their regions. The guide is divided into the following sections:

Inclusive Schooling and School Wide Enrichment

Identification Process

Program Planning

Professional Development

Appendices

Bibliography



# Inclusive Schooling and School-Wide Enrichment

A mind once stretched never returns to its original shape.

(Oliver Wendell Holmes)



# Inclusive Schooling and School-Wide Enrichment

## Introduction

School-wide enrichment provides a foundation of support to students with gifts and talents while enhancing educational opportunities for all students. The expertise and skills that are abundant in any school community are often untapped to their full potential. School-wide enrichment is a basis for forming meaningful linkages with the community.

It is not always possible to predict which speaker, workshop, presentation, or hands-on experience will ignite a spark in a particular student—a spark that can lead a student into areas previously unknown. Different kinds of learning experiences impact student motivation in diverse ways.

Enrichment experiences comprise more than presentations by occasional speakers or the occasional workshop. The teacher has a role in extending the learning opportunities that a speaker or workshop may provide. The following example illustrates this point:

Your students had the opportunity to listen to a bone specialist talk about the human skeleton. She brought in a model of a skeleton to help illustrate her points to the students. Your class appeared quite interested and many raised good questions. However, one young boy, Jesse, asked unusual and probing questions and seemed captivated by every intricate detail of the discussion. Even the speaker commented to you that Jesse exhibited a keen interest and understanding unusual for children of his age.

Jesse came to class the next day carrying the skeletal framework of the skull of a moose or larger deer which his father had come across one day on a walk in the woods. Now as a teacher you know you have a highly motivated student. *Carpe diem!*

There are a variety of ways to proceed. Talk with Jesse and brainstorm with him possible ideas for an extended learning experience on bones (a five-minute exercise). He might want to create a learning centre on the human skeleton to share with younger children. This would require Jesse to conduct research and explore the topic before embarking on such a venture. After the research is completed, Jesse is ready to put together his learning centre. The centre would contain his original work and might include fact cards, pictures, a large puzzle of a human skeleton along with an audio tape



and Jesse as the skeleton, doing the talking, asking the children to put him back together again! Crossword puzzles and a tub of home-made creative clay could also be included. Use of the Internet to research and a multimedia presentation could also be explored. The teachers of other grades could invite Jesse to work with their students in small groups sharing his centre on skeletons and his enthusiasm with them thus creating a learning experience for all the students!

This illustrates how a single guest speaker can be the starting point to further adventures in learning. A speaker's visit may have an impact on the learning of one student, a group of students, or perhaps your whole class! Speakers can provide the springboard into meaningful extensions of learning.

The approach seeks to develop high levels of multiple potentials in a broad range of students

(Phi Delta Kappan 1998)

A school-wide enrichment team is an invaluable support for teachers in organizing and planning extensions of learning for students. Such a team could be made up of the school principal, teachers, parents, community participants, and students where applicable. Existing workgroups, such as individual program planning teams and school improvement teams also could be utilized. (See Appendix A, *Developing inclusive Schools Process for School Based Meetings*.)

The school-wide enrichment team knows the resource base of the school community and acts as the catalyst for enrichment opportunities at the school and classroom level. Teachers should consider what kinds of enrichment experiences enhance student learning. Guidance in addressing school-wide enrichment can be found in Renzulli and Reis (1997), *The Schoolwide Enrichment Model: A How to Guide for Educational Excellence*, which outlines "a systematic set of specific strategies for increasing student effort, enjoyment, and performance and for integrating a broad range of advanced learning experiences and higher-order thinking skills into any curricular area, course of study, or pattern of school organization."<sup>1</sup> A planning guide may help teachers and the enrichment resource team to track their school programming experiences and activities. (See Appendix B, *Action Form 3-A Planning Guide*.)

#### School-Wide Enrichment

- provides opportunities for students to explore many areas of study and to engage in creative and critical thinking and problem solving (See Options in Programming; Process.)
- helps students identify their own areas of strengths and interests
- provides students with ways to further develop these strengths
- enables students to experience diverse learning environments
- strengthens ties with the community and utilizes local expertise
- assists teachers to evaluate the teaching and learning process to ensure that student needs are met

# Ideas for School-Wide Enrichment

## Exploratories

Exploratories are periods of time designated for enrichment activities. For example, one week in the first term and one week in the second term would be built into the school schedule as enrichment blocks of time. A school might designate Wednesday afternoons for enrichment programming. For example, each staff member or students, could give workshops about a particular interest or area of expertise. Students choose topics of interest independently by signing up for a number of workshops that rotate throughout the day.

## Seminars

Seminars enable students to explore a topic in an in-depth, concentrated way over a short period of time. Seminars are guided by teacher-mentors who support students to analyse, synthesize, and evaluate information in an inquiry based format.

... the seminar is an ideal opportunity to explore and investigate independently and then share ideas with other students ... the teacher becomes part of the discussion group, sharing in the discussion group, sharing in the inquiry process instead of serving as information on disseminator.

(Dixon 1994, 12)

## School-Wide Challenges

School-wide challenges stimulate creative and critical thinking and problem solving. The school might announce a five-minute brainstorming blitz where each class is to come up with as many responses as possible to the posed challenge; for example, "In what ways are ski hats like swim fins?" More defined challenges can also be organized in a given curriculum area; for example, a mini-science Olympics where students work in teams to solve intriguing challenges.

## Speaker's Bureau

Schools might tap into areas of expertise and interest in the community by sending home a Community Resources Survey. (See Appendix C-1, *Community Resources Survey*.) Having a guest visit your class initiates opportunities for other meaningful learning activities. The experience should never begin and end with the speaker's presentation, but have a meaningful place in the curriculum planning process that provides for opportunities to integrate and extend learning.

Learning is its own  
exceeding great reward.

(Hazlitt 1826)

## Exchanges

Within a school or across regions, student and teacher exchanges enhance learning opportunities and introduce new environments and ideas. With increased accessibility to technology, students can exchange information and ideas through the Internet and video conferencing.

## Learning Centres

Learning enrichment areas, or learning centres, provide additional opportunities to explore and examine particular concepts, issues, or themes. For example, a centre on gravity could include research information (print, software, Web sites), videos of interviews and space travel, hands-on experiments and problem-solving activities.

The centre serves as a resource for those who may be engaged in independent work either assigned by the teacher or self-initiated. Students should be encouraged to propose ideas for topics or areas of interest.

## Weekend/Noon Time Workshops

Community involvement is a critical component in launching Weekend/Noon Time Workshops. These workshops could explore several topics or focus on one issue or theme. Not only are learning opportunities extended for students through such an initiative, but students are able to see others in the community as mentors or instructors with many skills and much expertise to offer young people. Building linkages with positive adult role models within the community can be beneficial to all parties concerned. (See Appendix D, *Sample of a Weekend Program*.)

Please see Options in Programing (p. 30) for more ideas on how to extend learning for all students.

## Identification Process

So precious a talent as intellect never was given to be wrapt and buried in the earth.

(Angelina Brimke)





# Identification Process

## A Holistic Perspective

This section outlines a variety of issues and perspectives to consider in the identification of students with gifts and talents. A holistic approach, including academic, social, emotional, cultural, and behavioural perspectives, is critical to a comprehensive identification and assessment process.

Often students with gifts and talents are viewed only in terms of academic performance and achievement. It is critical that educators also nurture the social and emotional development of gifted students. Every exceptionality brings with it a myriad of complex issues which must be recognized and addressed.

Students with gifts and talents often have difficulty in social interactions with their age peers and may become socially isolated. Coleman and Sanders (1993) note that there is no empirical evidence that these students have different social needs than their peers; however, their experiences in growing up may be atypical.

We do know that growing up gifted is not the same as growing up as a typical teenager because children who are gifted possess abilities which put them outside the norm ... a child who is gifted encounters reminders that some aspects of him or herself are more acceptable than others. The child begins to comprehend that knowledge of his or her difference by others is potentially discrediting because that knowledge interferes with normal social interactions.

There is other evidence that teenagers who are gifted do attempt to manage the information others have about them. When presented with a series of scenarios describing students in some typical situations, we discovered that teenagers who were gifted generally tried to mask their giftedness.

(Coleman and Sanders 1993)

In young children, knowledge and understanding of social interactions is not as sophisticated. Consequently, advanced conceptualization and linguistic competence can produce tension among peers. The following example illustrates the point:

Joey was a young four-year old who thrived on challenging himself at all times. Joey did not get along with other four-year olds for many reasons. When they played dinkies by running the vehicles around and crashing them, Joey was discussing the vehicles in terms of rear-end suspension, cylinders, transmission, etc. He was reading the newspaper daily, especially the car

advertisements. His memory was profound and he could recite the license plates of visitors to his home as he played around on the floor. Joey attempted to socialize with the older kids in the neighbourhood—seven and eight year olds. But this did not work either. As the children would play a very unstructured game of kicking around a soccer ball, Joey would interrupt to explain the proper rules and procedures of the game—and he was adamant about them. The children soon learned that they would have to go elsewhere to enjoy the game. Again, Joey was left alone.

Students with gifts and talents may challenge generalizations and appear to be rebellious toward authority. They may be the ones to interrupt the teacher by taking exception to what is being taught. For example, a young boy argues with his teacher that the Chinese, not the Germans, invented printing. A strong sense of social justice, morality, and sense of fairness may also lead gifted learners to challenge generalizations and common assumptions.

Belonging overshadows achievement.

(Mendaglio 1993)

One female junior high student, Marie, was deeply engaged in investigating the rain forest and all the environmental issues which accompanied this study. She was from a coal-mining community and had heard David Suzuki speak of the environmental hazards involved in the mining of the coal. Thus the dilemma. She explained: "How can I make judgements on what is happening in the rain forest and ignore what is happening in my own backyard? Yet how can I be critical of this local issue when I know my family makes its living through the mining of coal?"

Being gifted and female can create its own set of challenges. Society's aspirations and expectations for males and females often lead females to suppress their abilities and begin to develop patterns of low self-esteem and achievement ... gifted girls are in dire danger of behaving according to the stereotype constructed for them by the culture (Gallagher 1975). Identification of gifted females requires particular attention. Research has shown that gifted females tend to hide their talents and play socialization roles of adapting, pleasing, and generally fitting in. Mendaglio (1993) notes that the "underground" gifted are generally, but not always, female and that, for them, belonging overshadows achievement. Further, decreases in self-esteem and self-confidence in gifted females have been identified with increases in age during adolescent years (Kline and Short 1991).

Students with gifts and talents can become intensely focussed on a topic or an area of interest. They may be unwilling to leave this area of interest and may be viewed as being self-absorbed or self-centered. They may also be perfectionists and not give themselves credit for an achievement unless they feel it is perfect. Avoidance behaviour can result as the student rationalizes, "If I don't try, I can't fail." Students may find it easier to avoid a task than to show concerted effort and not excel. It is important to provide positive and supportive learning opportunities to encourage risk taking.

It has been estimated that students with gifts and talents are engaged in learning for only 50 percent of their school day in elementary classrooms when there is no attempt to extend the curriculum (Hollingsworth 1990). If the student is not involved in learning on a consistent basis, respect for the learning process is not developed. The situation could result in poor study habits, inappropriate behaviour (class clown or bully), a "psychological" dropping out of school, and the ultimate withdrawal-quitting school. Research has shown that up to 20 percent of all high school drop-outs may be gifted (Davis and Rimm 1985).

The surest path to high self-esteem is to continuously be successful at learning tasks they perceived would be difficult! Each time we "steal a student's struggle," we steal the opportunity for them to develop high self-esteem.

(Rimm 1986)

## Definition and Characteristics

The following definition was adopted by the Nova Scotia Department of Education and Culture in 1992:

The term "gifted" refers to students who give evidence of outstanding performance capability in areas such as intellectual, creative, artistic, or leadership, or in specific academic fields.

There is no one profile of a gifted learner. This section expands the definition to include characteristics of students who may be identified as being gifted. **The characteristics are not all inclusive and students with gifts and talents may not exhibit all of these characteristics at any given time.** Schools that implement school-wide enrichment are able to develop opportunities and experiences for students to meet multiple potentials. It is recognized, however, that some students will require individual program plans to address their needs. The process of identification should assist in determining strengths and needs to form the basis for program planning. It is not for the purpose of labelling or streaming students. Renzulli (1997) notes the difficulty in traditional identification procedures which have often restricted services to "small numbers of high scoring students and excluded large numbers of at risk students."

Our vanity desires that what we do best should be considered what is hardest for us.

(Nietzsche 1986)



## Intellectual/Cognitive Aptitude— has superior reasoning ability

| Characteristics                                                                                                                                                                                                                                                                                                                     | Does the student                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• questions critically</li> <li>• constructs abstractions</li> <li>• learns rapidly and easily</li> <li>• thrives on complexity</li> <li>• analyses, evaluates and synthesizes information</li> <li>• thinks analogically</li> <li>• demonstrates precocious language and thought</li> </ul> | <ul style="list-style-type: none"> <li>• ask many questions?</li> <li>• have a wide general knowledge?</li> <li>• become unusually upset at injustices?</li> <li>• seem interested in and concerned about social or political problems?</li> <li>• often have a better reason than you do for not doing what you want done?</li> <li>• show disinterest in repetitive tasks?</li> <li>• engage in multiple tasks simultaneously?</li> <li>• become impatient if work is not "perfect"?</li> <li>• seem to be a loner?</li> <li>• complete only part of an assignment or project and then take off in a new direction?</li> <li>• appear restless or daydream?</li> <li>• like solving puzzles and problems?</li> <li>• have his or her own idea about how something should be done and stay with it?</li> <li>• use metaphors and abstract thinking?</li> <li>• enjoy debating issues?</li> </ul> |

### Example

The following example is illustrative of a student displaying some of the above characteristics.

One night, a mother was reading some poems by Shel Silverstein to her 5-year-old son. She read the following poem and stopped after the 4th line.

Who wants a pancake,  
Sweet and piping hot?  
Good little Grace looks up and says,  
"I'll take the one on top!"  
Who else wants a pancake,  
Fresh off the griddle?  
Terrible Theresa smiles and says,  
"I'll take the one in the middle!"



The following conversation then took place:

Mother: "Now where would someone named "Terrible Theresa" take the pancake from"?

Son: "Oh, from the middle, of course."

Mother: "Why would you say that"?

Son: "Because the middle is the hottest."

Mother: "How do you know that"?

Son: "It's the same as the Earth. At the core it's the hottest, just like the stack of pancakes."

He quickly made an abstraction from a seemingly unrelated topic to problem solve on an independent basis. The reply is indicative of his ability to analyze and evaluate information and to think analogically, which is characteristic of many students with gifts and talents.

## Specific Academic Aptitude—

demonstrates the characteristics of advanced intellectual/cognitive ability in one or more subject areas

| Characteristics                                                                                                                                                                                                                                                                                                                                                                         | Does the student                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• produces qualitatively superior outcomes</li> <li>• shows intense interest and/or commitment to a topic/focus</li> <li>• demonstrates advanced/sophisticated knowledge and understanding</li> <li>• learns easily in particular subject area(s)</li> <li>• obtains high success in subjects of interest</li> <li>• connects idea(s)</li> </ul> | <ul style="list-style-type: none"> <li>• show unusual ability in a particular area?</li> <li>• show fascination with one field of interest? manage to include this interest in all discussion topics?</li> <li>• enjoy meeting or talking with experts in this field?</li> <li>• solve problems with ease, but may find it difficult to explain his/her thinking process?</li> <li>• analyse and evaluate information?</li> <li>• invent obscure systems and codes?</li> </ul> |

## Creative—

consistently engages in divergent, original thinking that results in unconventional responses to conventional tasks (Johnson 1992)

| Characteristics                                                                                                                                                                                                                                                                                    | Does the student                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• creates, designs, invents</li> <li>• thinks independently</li> <li>• makes jokes and puns at unexpected times</li> <li>• takes risks and speculates</li> <li>• demonstrates a certain intellectual playfulness; gives free rein to imagination</li> </ul> | <ul style="list-style-type: none"> <li>• try to do things in different, unusual, imaginative ways?</li> <li>• have a bizarre sense of humour?</li> <li>• enjoy new routines or spontaneous activities?</li> <li>• thrive on variety and novelty?</li> <li>• create problems with no apparent solutions and enjoy asking you to solve them?</li> <li>• pose controversial and unusual questions?</li> <li>• have a vivid imagination?</li> <li>• seem never to proceed sequentially?</li> </ul> |

### Example

It was the second day of school and the grade two children stared openly at a newcomer: six-year-old Charlie, who had been moved abruptly into their room after one day in grade one. Charlie tried to relax by concentrating on his stamp collection at home, remembering his lengthy correspondence battle the previous year with one company. (Dear Sir, I plan to take you to court unless your nuisance bills stop immediately for stamps that I have not ordered. I am five years old.) Just then the teacher picked up something from the floor. "Who dropped an eraser?" Charlie tried to stifle a giggle. The teacher, reddening, demanded to know the joke. The new boy looked around the class and again giggled. "Who shaves around here?" ... he found humour in puns that went over the heads of all his classmates — and sometimes the teachers too.

(CEA Survey 1980)

"Do dinosaurs have hair in their nostrils?"

(Grade 4 Student)





## Artistic—

demonstrates outstanding ability in the visual and performing art

| Characteristics                                                                                                                                                                                                                                                                                                                                                             | Does the student                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>expresses intense feelings, thoughts and moods through art, drama, music and/or dance</li> <li>produces original products</li> <li>sophisticated use of techniques, media</li> <li>critiques work for self and others</li> <li>takes advantage of open-ended assignments as a means of producing artistic interpretations</li> </ul> | <ul style="list-style-type: none"> <li>display abilities in the arts (music, dance, drama, painting, etc.) without formal instruction?</li> <li>experiment with new materials, use unique combinations?</li> <li>compose and create original music, dance, drama, art?</li> <li>observe minute details in products or performances?</li> <li>assume quickly the role of a character and imitate or mime people or animals?</li> <li>have high sensory sensitivity?</li> <li>draw or sculpt objects in a different way from other students?</li> <li>build depth into drawings, plan the layout of pictorial elements and use correct proportions?</li> </ul> |

**Example**

When he was three years old, Yehudi Menuhin was smuggled into the San Francisco Orchestra concerts by his parents. The sound of Louis Persinger's violin so entranced the youngster that he insisted on a violin for his birthday and Louis Persinger as his teacher. He got both. By the time he was ten years old, Menuhin was an international performer.

(Menuhin 1977)

Violinist Yehudi Menuhin's musical intelligence manifested itself even before he had touched a violin or received any musical training. His powerful reaction to that particular sound and his rapid progress on the instrument suggest that he was biologically prepared in some way for that endeavour.

(Gardner 1993)



In music class the child's voice rises over the other; in art, the child's hand reaches for the colours which link the picture to the child's imaginings; in drama, the simple response asked for by the teacher is turned by the child into a dramatic presentation.

(Gardner 1993)

## Leadership—

demonstrates outstanding ability to lead

| Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Does the student                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• is assertive</li> <li>• demonstrates self-confidence</li> <li>• organizes people, events with ease</li> <li>• motivates others</li> <li>• interprets political/social context</li> <li>• facilitates teamwork</li> <li>• directs, may tend to dominate</li> <li>• adapts to new situations readily</li> <li>• is accepted by peers as a leader</li> <li>• uses synergy</li> <li>• sees the "big picture"</li> <li>• communicates effectively</li> <li>• facilitates action</li> <li>• is resourceful</li> <li>• perseveres</li> </ul> | <ul style="list-style-type: none"> <li>• organize and lead group activities?</li> <li>• sometimes take over?</li> <li>• demonstrate a confident, self-assured attitude?</li> <li>• take risks?</li> <li>• seek actively a decision-making role?</li> <li>• synthesize ideas and information from many different sources?</li> </ul> |

## Multiple Intelligences

Students demonstrate giftedness in many areas and in many ways. "It is of the utmost importance that we recognize and nurture all of the varied human intelligences, and all the combinations of intelligences" (Gardner 1987). Work on multiple intelligences by Howard Gardner, of the Harvard Graduate School of Education, has revolutionized the concept of intelligence. He presents a view of intelligence as multi-faceted, and focuses on "the capacity for (1) solving problems and (2) fashioning products in a context rich and naturalistic setting" (Armstrong 1994).

Gardner's theory of multiple intelligences identifies seven categories of "intelligences." However, it should be emphasized that these "intelligences" rarely exist in isolation; there is constant interaction among them. Armstrong (1994) gives an example of this interaction when describing intelligences used to play the game of soccer: e.g., bodily kinesthetic (to run, kick and catch), spatial (to orient to the playing field and the ball in space), and linguistic and interpersonal (to discuss rules and strategies and to play co-operatively). These seven intelligences are briefly described on the following page.<sup>2</sup>



| Intelligence         | Description                                                                                                                                                                                                                              |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| linguistic           | <ul style="list-style-type: none"> <li>• ability to use words effectively, orally and in writing</li> <li>• ability to manipulate the structure, sounds, and meanings of languages as well as the practical uses of language</li> </ul>  |
| logical-mathematical | <ul style="list-style-type: none"> <li>• ability to use numbers effectively and to reason well</li> <li>• ability to recognize patterns, discern relationships, make if-then cause-effect connections, and other abstractions</li> </ul> |
| spatial              | <ul style="list-style-type: none"> <li>• ability to perceive visual-spatial world accurately, to see line, shape, colour, form, space and the relationship among them</li> <li>• ability to form mental images</li> </ul>                |
| bodily-kinesthetic   | <ul style="list-style-type: none"> <li>• ability to use the body to express emotion and produce or transform things, play a game (as in a sport)</li> </ul>                                                                              |
| musical              | <ul style="list-style-type: none"> <li>• ability to perceive, discriminate, transform, express musical forms. This can be both intuitive and analytic</li> </ul>                                                                         |
| interpersonal        | <ul style="list-style-type: none"> <li>• ability to perceive and make distinctions in the moods, intentions, motivations, and feelings of other people</li> <li>• ability to communicate and co-operate</li> </ul>                       |
| intrapersonal        | <ul style="list-style-type: none"> <li>• ability to know and understand self and to act on the basis of that knowledge</li> <li>• ability to discern connections with the larger order of things</li> </ul>                              |

Exploration of these "intelligences" and the implications for teaching and learning can lead teachers and administrators to develop a more in-depth understanding of human potential. This, in turn, provides educators with a more holistic perspective in the identification of students with exceptional abilities.<sup>3</sup>

All human beings possess these intelligences; therefore, these intelligences must be seen as potential ways to create meaning. While people have the potential to develop each of these intelligences, it is possible to have strengths or aptitudes in different areas. Thus, if education is viewed in terms of multiple ways of knowing, education must provide diverse opportunities for all students to develop these aptitudes and intelligences.

(Nova Scotia Department of Education and Culture 1995)

## Obstacles in Identification of Giftedness

Identifying students who are learning-disabled and gifted can be problematic. Difficulties in conceptualization of the defining characteristics and in appropriate assessments often mask the potential for exceptional performance.

*Obstacles in identification include the following (Sapon-Shevin 1986):*

- stereotypic expectations
- inappropriate instructional processes which centre on traditional textbook-workbook or lecture exercise-test modes of instruction
- children's giftedness may allow them to compensate for their learning disability in such a way that their areas of difficulty are not readily apparent

Care must be taken, therefore, to carefully examine assumptions and stereotypes while considering each student's strengths and needs.

Students with gifts and talents are found within all socio-economic strata and all racial and ethnic groups. Students outside the dominant culture may exhibit characteristics of giftedness that may not be recognized in the school system. Historically, African Canadian and Mi'kmaq students have rarely been identified as gifted or talented. Indeed, because of racial stereotypes and systemic racism, many African Canadian students were relegated to the "Special Education" or "Behaviour Adjustment" classes although they may have exhibited characteristics of giftedness (Black Learners Advisory Committee Report on Education 1994). In addition, research has shown that standardized test scores and checklists of the characteristics of gifted students are not reliable predictors of potential among cultural minorities in North American schools. Howley (1986) states that "groups of people who have been systematically oppressed by society are unlikely to demonstrate the evidence of superior performance within the society."

Recent studies show that racially visible and ethnically diverse students continue to be under-represented in gifted education. Peterson and Margolin (1997) state, "We can see the consequences in the continued under representation of minority children in gifted programs, despite inclusive philosophies, attempts to create more culture-fair assessment instruments ... and admonitions about using multiple criteria for selection ... the selective distribution of positive labels in our schools parallels and supports the class differences and racial discrimination found in society as a whole ..." The Nova Scotia Department of Education and Culture is committed to equity and diversity and to maximizing the potential of all its students. In 1996, results from a Statistics Canada

survey showed that "children who are better off financially do better in school. Canada's poorest children are three times as likely, as the best-off children, to be in remedial classes, and the richest pupils are almost twice as likely to be in gifted classes as the poorest. Poor students are at greater risk of dropping out." <sup>4</sup> All schools must ensure that enrichment activities and programming involve students reflective of the school population and of Nova Scotia. Guidance counsellors, principals, and teachers must seek out and motivate gifted racial minority students as well as, students from all socio-economic backgrounds.

The following characteristics may be exhibited by students with gifts and talents. Caution should be taken to ensure that these characteristics do not exclude consideration of the need for enhanced or extended programming.

*Students with gifts and talents may*

- exhibit boredom with routine tasks and refuse to do rote homework
- focus on an area of study to such an intense degree that they refuse to move to other areas of study
- be self-critical, impatient with failures
- be critical of others, of the teachers
- disagree vocally with others, with the teacher
- make jokes or puns at inappropriate times
- be emotionally sensitive—may overreact, get angry or cry if things go wrong
- not be interested in details; produce messy, careless work
- refuse to accept authority, be nonconforming or stubborn
- tend to dominate others
- daydream
- appear disorganized and be easily distracted

(See Appendix E-1, *Parent/Guardian Information Form-Elementary* and Appendix E-2, *Student Interest Inventory-Elementary*.)

Students with gifts and talents may be the object of misunderstanding and hostility because they may think and act in ways that are not always understood.

Gifted students need to gain a feeling of self-worth and to develop a positive self-concept. They need to feel valued for their own sakes and not just for their accomplishments. It becomes too easy to talk to them and to others about their accomplishments and thus minimize the individual.

(Bienhler 1992)

## Assessment

School boards policies should ensure that a combination of informal and formal assessment is used in assessing students to determine the need for program planning.

Assessments should be carried out by a school team including the student (as appropriate), parent(s), administrator(s), teacher(s), and specialist personnel (e.g., psychologists, school counsellors, consultant/supervisors) where appropriate. Early and continuous assessment ensures that the program developed meets the student's needs. School boards are responsible for ensuring that this process is developed and implemented.<sup>5</sup>

The following assessment guidelines may assist in developing and implementing the assessment process:<sup>6</sup>

- The assessment process must include multiple instruments, multiple contents, and multiple observers.
- The assessment process should be available to all students.
- Assessment procedures used should measure diverse abilities/intelligences.
- The assessment should be sensitive to the needs and experiences of male and female students, students with learning disabilities, and racially visible and ethnically diverse learners, notably African-Nova Scotian and Mi'kmaq students.
- Assessments should include information on potential as well as demonstrated abilities.
- Assessment procedures should correspond to the area(s) of ability being assessed.
- Assessment procedures should employ qualitative and quantitative information.

Possible sources of data to assist in the assessment process may include the following qualitative and quantitative measures:

### Qualitative Measures

- anecdotal observations from parents, teachers, peers, mentors, community leaders, or students (self-nomination)
- checklists or inventories (see Sample Checklists)
- samples of students' work, e.g.:
  - unusual/exceptional solutions to problem-solving activities
  - consistently high achievement in relation to performance standards
  - writing samples, creative constructions, media productions
  - evaluations by mentors
  - adjudicated performance (e.g., science fairs, writing competition, music/theatre/drama performance)
- demonstrations of creative and critical thinking

The assessment process should be broad based and include all students who may require individual programming to meet their needs.

(Nova Scotia Department of Education and Culture)

## Quantitative Measures

When qualitative measures do not yield sufficient information on the need for program planning, quantitative measures may be used to provide additional information.

Achievement and individual cognitive ability assessments are two examples of quantitative measures.

- Nondiscriminatory assessment procedures and instruments are essential in order to ensure that the assessment process is equitable across populations.<sup>7</sup>
- Parents and other professionals should be involved in the process of identifying the strengths and needs of the students. Such interactive involvement will ensure that all parties have input and an understanding of the process.<sup>8</sup>
- A systematic and ongoing plan to re-evaluate current assessment procedures should be employed.

The main purpose of the assessment process is to gather information for program planning to meet each student's unique learning needs. The following section on the development of a student profile may assist in this regard.

## Developing a Student Profile<sup>9</sup>

Developing a student profile provides a deeper understanding of an individual's unique interests, styles, and abilities. By gathering information from a variety of sources, teachers and school-based teams are in a better position to make educational decisions that will enhance the student's development.

Means of gathering data include the following: observations of student performance; assessment of student products, portfolios, journals, and learning logs; informal and formal classroom testing; learning style inventories; interest inventories; rating scales of student characteristics; previous report cards; information from parents; and psycho-educational testing.

Five areas to consider are the student's

- academic achievement
- learning styles and strengths
- interests
- special abilities
- visions and goals for the future

**Academic achievement** tells us what the student knows and is able to do in various areas of the curriculum. Systematically observing a student during learning activities, analyzing student products, and using learning inventories are a few ways to gather information. In addition to academic achievement, assessment instruments that have a ceiling many years beyond the student's age level can provide information about the student's maximum

level of performance in relation to the items on the instrument. This information is valuable when selecting learning activities, materials, and environments that can provide a challenge.

**Learning styles and strengths** refer to the way a student approaches learning. The concept of learning styles is approached by different authors from a variety of perspectives.

Gardner's multiple intelligences theory describes seven different areas in which a student might show learning strengths. Kanevsky, Maker, Nielsen and Rogers (1994) devised a checklist that describes twelve characteristics associated with giftedness. (See Appendix F, *Sample Checklist*.) This checklist is intended to help teachers make systematic observations that can lead to assessment and identification of students with gifts and talents.

**Interests** of the students can provide a basis for curriculum development, extensions and independent studies. While teachers have many ways to find out about student interests, some published inventories can be helpful. *The Interest-A-lyzer* (Renzulli 1977), for example, is appropriate for middle and secondary school students (See Appendix E-2, *Student Interest Inventory-Elementary*.)

**Special abilities** refers to the student's talents that may or may not be exhibited through the school's curriculum. The student may have a special ability to take apart and put back together mechanical objects. Perhaps the student is an accomplished pianist, figure skater or actor. Special abilities can often be identified through knowledge of the student's hobbies, extracurricular activities and outside interests.

**Vision and goals for the future** are the student's personal values and hopes for the future. This includes the student's desired lifestyle, possible careers, and community interests set in the context of a long-term vision. Creating a vision or desired future provides the student and teachers with a focus for individual planning.

# Program Planning

Not everything that counts can be counted and not everything that  
can be counted counts.

(Albert Einstein)







# Program Planning

## Introduction

Diversity within school populations challenges schools to organize a system of program planning and support to meet the needs of all students. Public School Programs: 1998–1999 states that, "the curriculum must be adapted to meet the varying rates, patterns, and needs of all students from elementary through senior high school." Adaptations for students with gifts and talents ensure that these students have opportunities to develop to their maximum potential.

Programming for students with gifts and talents must be driven by their learning needs. When there are no clear outcomes established for programming, there are no clear criteria for success. Curriculum development for students with gifts and talents should be viewed as an application of the same principles applied to good curriculum development generally; the central topic is not giftedness, but the adaptation of good design, instruction, and assessment practices to meet the enhanced capacities of the exceptional learner.

Programming supports may be provided in a variety of ways. Usually, such supports can be provided in the context of and related to the public school program of studies. The degree of differentiation required will be determined by the learner's need.

Classroom teachers provide for many of the needs of gifted learners using enrichment activities, adapted instructional approaches, assessment strategies, learning environments and resources. However, the classroom and the public school program may not meet the needs of some students with exceptional abilities. When designated learning outcomes are changed to meet the needs of students or additional outcomes are developed, an **individual program plan** must be developed and implemented<sup>1</sup> (See Appendix G, *Individual Program Plan.*) (IPP)

Program planning includes the outcomes, methodology, evaluation and resources designed for a student. The following program design guidelines may assist developing programs and services to meet the needs of gifted learners.

### Programming should

- be developed to meet the needs of individual students
- be articulated utilizing the learning outcomes framework as a base
- be comprehensive, structured, and sequenced
- be an integral part of the student's school experience
- incorporate both enrichment and acceleration as required to accommodate student needs



- provide for the guidance as well as the academic needs of the students
- take full advantage of the special talents and interests of the teaching staff and the local community
- be facilitated by an administrative structure which supports the process, e.g., flexible scheduling, planning time

## Options in Programming

A system-wide approach to programming for the gifted requires a variety of options/strategies and flexibility in meeting individual needs. Students spend the majority of their time in grade level/subject area classrooms. The program planning process is a support to the teacher and student in providing comprehensive and consistent programming.

The following section highlights some of the options that may be used in developing programming for students requiring extensions and enhancements.<sup>2</sup>

These are divided into the following sub-sections:

- **content** (what the student learns)
- **process** (how the student learns)
- **products** (how the student demonstrates what he/she knows)
- **learning environments** (where the student learns)

### Content

The content of the curriculum consists of the facts, concepts, issues, problems, and themes that students study in their pursuit of learning. Students with gifts and talents may absorb material at a faster pace, work well with abstractions, make learning connections easily, and/or have interests more like those of older students.

The following organizational strategies provide opportunities for learners to learn at their own pace and level:

- acceleration
- telescoping
- compacting
- independent study
- learning centres
- weekend/summer programming

In addition, there are a number of curricular models that can be used to enhance content. Focussing on learning outcomes, recognizing time as a variable, and ensuring that students continually move ahead in their learning, reflect good teaching practice in general. For learning to be effective, experiences should build on what the student already knows and can do, and challenge the student to extend his/her learning into new areas.

## Acceleration

Acceleration enables students to meet curriculum outcomes at a faster pace commensurate with their needs and abilities. Students can be accelerated by grade or by subject. In the latter case, a student in grade 6 may be engaged in working towards grade 7 specific curriculum outcomes in math while working towards language arts outcomes at grade level.

While some resist acceleration as a strategy, research supports the practice. Acceleration has been shown to be positive for both achieving and underachieving gifted learners in the majority of documented cases (Benbow and Stanley 1983; Kulik and Kulik 1992). In addition, the work of Julian Stanley and his colleagues at John Hopkins University has given us almost 20 years of data about student acceleration. The researchers have unequivocally concluded that, for highly gifted children, the long-term benefits of acceleration can far outweigh any disadvantages (Winebrenner 1992).

When employing accelerative practices, schools should consider the following:

- a careful assessment to determine areas in which prerequisite outcomes may not be complete
- an assessment of the student's social/emotional and behavioral strengths and needs
- a trial basis, during which time all parties should meet to decide how well the student is progressing (consultation should include the student whenever possible)
- gradual inclusion of the student into the next grade level in a way that is sensitive to or allows for the possibility that the student may not successfully make the transition. Although it is rare that the transition is not successful, precautions must be taken to ensure that the student feels no sense of failure in the process.

Research indicates that the most beneficial years for grade acceleration are prior to grade 3, and that acceleration should take place only once in elementary and once in high school (Winebrenner 1992).

In order for acceleration to occur, it is important that boards develop guidelines whereby teachers and school program planning teams can be guided in this decision-making process. Parents must be equal partners in helping to determine what (if any type of acceleration) would be beneficial to their child.<sup>3</sup>

Other options include the following:

**Concurrent enrollment** provides students with the opportunity to take university or community college courses while enrolled full-time in the public school system.

**Advanced Courses.** The department recognizes the importance of providing a wide range of learning experiences to accommodate the diverse needs of senior high students, and of promoting equitable access to educational experiences. At the grade 10 level, courses have been developed to provide all learners with access to a strong foundation of common educational experiences. These courses engage students in a variety of groupings and interactions as contexts for learning, and offer a range of experiences which provide both challenge and support.

To prepare students for a range of post-secondary destinations, grades 11 and 12 programs include course offerings that are increasingly specialized; as such, these grades are referred to as the specialization years. A list of advanced courses currently offered can be found in the most recent edition of the *Public School Programs*.

Requests for approval of locally developed courses as advanced credits will be evaluated with reference to the *Advanced Courses: Interim Policy Guidelines*, January 1999, and to the framework provided by the principles of learning, the essential graduation learnings, and the general and specific curriculum outcomes of related public school programs and courses.

The principal of a school that offers advanced courses is responsible for promoting and ensuring equitable access to such courses. Every effort should be made to ensure a diversity of students so that the enrolment in advanced courses reflects the gender balance and the racial, ethnic, and cultural diversity of the school population. Equitable access to and enrolment in advanced courses will be monitored by the school board and reported annually to the Department.<sup>4</sup>

The International Baccalaureate Program (IB) is a high school curriculum designed to meet the needs of students internationally. This may be offered to individual or small groups of students as a curriculum option in high school. Following is an excerpt from International Baccalaureate North America.

The International Baccalaureate Program (IB) is a comprehensive and rigorous two-year curriculum, leading to examinations, for students aged between sixteen and nineteen. Based on the pattern of no single country, it is a deliberate compromise between the specialization required in some national systems and the breadth preferred in others. The general objectives of the IB are to provide students with a balanced education; to facilitate geographic and cultural mobility; and to promote international understanding through a shared academic experience.

IB courses are recognized as advanced courses at grades 11 and 12 and may be credited towards graduation requirements whether taken as part of a complete IB Program or as discrete courses.

**Early admission to post-secondary studies.** With the co-operation of the university, a student may enter university early. The traditional entrance requirements may be waived in such special circumstances.

**Challenge for credit.** The Department of Education and Culture recognizes that students may have already acquired the knowledge, skills and attitudes that an existing course seeks to develop. Challenge for credit provides a process for students to demonstrate that they have achieved learning outcomes as defined in the most recent edition of *Public School Programs* and the curriculum guide for a directly related course. (See Appendix H, *Challenge for Credit: Interim Policy Guidelines*.)

## Telescoping

Telescoping is reducing the amount of time allocated for a student to meet learning outcomes. Gifted learners may not need as much time as other learners to attain outcomes. For example, a student achieves/attains the outcomes for grades 8 and 9 math in one year. Telescoping can be used in conjunction with acceleration.

## Compacting

Compacting is a strategy designed to streamline the amount of time the student spends on aspects of the provincial curriculum. This strategy allows students to demonstrate what they know, to do assignments in those areas where work is needed, and then move ahead in their learning. Starko (1986); Reis, Burns and Renzulli (1992); and Winnebrenner (1992) suggest the use of compacting to reduce unnecessary repetition and to "buy" time for the students to work on an individual project of their choice. It may also be used to extend work in a given topic.

To compact curriculum the teacher needs to

- decide what the student must know in the area being considered for compacting
- find out what the student already knows
- design learning experiences for the student to learn new material
- work with the student in developing an individual program plan that may include
- enrichment in the compacted area
  - enrichment in an area of interest
  - an independent study project

The process of compacting can be used to develop an Individual Program Plan (IPP) for students. A thorough presentation of compacting with lists of resources and places to obtain them is presented in Reis, Burns, and Renzulli (1992).

## Independent Study

Independent study is a co-operative teacher student learning process.<sup>5</sup> It is based on a learning plan and expected outcomes. As part of the plan the student collects, organizes, creates, and shares information. The student involved in independent study works within a framework of these learning outcomes.

Independent study helps the student move from being teacher directed to learner directed. With teacher support and coaching the student learns how to decide on a focus, develop a plan of action and follow it through, and monitor the learning process. The student takes part in developing criteria for evaluation and works with the teacher as a partner.

At the senior high level, independent study credits offer students the option to design a course to meet their learning needs. (See Appendix I, *Independent Study Credits: Interim Policy Guidelines*.)

## Learning Centres

Learning centres are physical "stations" where students engage in activities designed to extend their understanding and thinking. Learning centres are designed to provide a range of opportunities for creative expression and production through the investigation of particular topics and issues. While the centres may not be directly related to curricular outcomes, they introduce the students to new possibilities for study. Learning centres are appropriate at any grade level. For the teacher, learning centres provide a way to work with small groups while the rest of the class is engaged in other assignments or centre work (Armstrong 1994).

## Weekend and Summer Programming

Appropriate programming must begin in school. However, a weekend or summer program may extend or complement the school's program. Such programs enable gifted youth to engage in in-depth study of interests and talents. (See Appendix D, *Sample of a Weekend Program*.)

Universities, colleges, art galleries, and theatres, as well as cultural, recreational and sport groups offer a wide variety of summer programs to challenge children and enhance learning opportunities. Examples of such opportunities include the Super Nova Camp (DalTech), Mini University Camps (Dalhousie, St. Mary's), Shad Valley Program (Acadia), Nova Scotia Gymnastics Association Camps, Young Neptune Summer Camps,

### Classroom Resources

*Curriculum Compacting  
The Complete Guide to  
Modifying the Regular  
Curriculum for High  
Ability Students*  
(Reis, Burns and Renzulli 1992)

*It's About Time:  
Inservice Strategies for  
Curriculum Compacting*  
(Starko 1986)

*Teaching Gifted Kids in  
the Regular Classroom*  
(Winebrenner 1992)



and Summer Music Camps (Acadia, Mount Allison). An annual listing of summer programming opportunities is published by the Division of Student Services, Department of Education and Culture. To access this information please contact the guidance counsellor in your local school or the Division of Student Services, Nova Scotia Department of Education and Culture.

## Curricular Models<sup>6</sup>

**Learning through broad-based themes** can be used to organize outcomes across curricular areas. A theme can span and integrate several disciplines and give rise to the study of many topics and issues. The content of the curriculum, the thinking and research skills used, and the products of the investigation are taken into consideration in the development of the theme and related systems. For example, teachers Sharon Frieson and Pat Clifford (Calgary, Alberta) used the theme "structures" with a multi-grade class. Throughout the year, all lessons were woven around this theme. Students were presented with two questions: What holds things together? What causes things to fall apart? Everything the students studied was viewed through the lens of these two interrelated questions. For example, the questions were used to study friendships, families, communities, countries, and economies. The same questions were used to examine plants, animals, and ecological systems. Students explored patterns in math and studied structures in literature. As part of a study of robotics, all students had an opportunity to experiment with building structures. Although the two teachers utilized intended learning outcomes for the year, they did not decide on the precise learning resources they would use. Instead, content emerged from the questions, interests, and concerns of the students as they related to the topic of study. These led to a variety of independent and group investigations. A final, important component of the program was the expectation that students would demonstrate the outcomes of their learning to parents and the community.<sup>7</sup>

**Learning through cases.** In case study teaching, students are presented with a realistic scenario that is woven around a dilemma. Students read the case and then work together in study groups to discuss questions about the case. After they have formulated some ideas about the issues, the teacher facilitates a class discussion. Through carefully designed questions, the teacher helps clarify and extend the thinking of students by drawing out what they know in a non-judgmental way. Using brainstorming techniques is helpful here. (Appendix J, *Brainstorming Techniques; Educational Problem-Solving Process*.) Students are encouraged to question aspects of the case they may not have considered. Often students find that, as a result of the class discussion, there are other things they will need to know before they can reach conclusions or make decisions about the issues presented in the case. Activities are then planned to explore these issues.

Learning without thought  
is labour lost, thought  
without learning is  
perilous.

(Confucius)

#### Classroom Resources

*Individualized Teaching of  
Gifted Children in Regular  
Classrooms*  
(Feldhusen 1986)

*Serious Players in the  
Primary Classroom:  
Empowering Children  
through Active  
Learning Experiences*  
(Wassermann 1990)

*Teaching Gifted Kids in  
the Regular Classroom*  
(Winebrenner 1992)

Cases require the student to think critically and make sound decisions. To make an informed decision the student needs to understand the facts of the situation, study it from different points of view, and, ultimately, think about the consequences of his/her opinions and decisions. Wassermann (1993, 1994) provides numerous examples of cases in her presentation of this methodology.

**Learning through problem solving.** Enhancing the curriculum through the study of problems is related to case study teaching. Both begin with a scenario that presents a multifaceted problem. In problem solving not only do students critically analyse the problem from different points of view. Students decide upon a solution, develop a plan of action for its implementation, and, in some instances, carry out the plan of action (Treffinger, Isaksen, and Dorval 1994).

School and community problems, environmental issues, political issues and global issues are sources of real problems to study. For teachers new to this process, the *Future Problem Solving Program* is a way to get started. Each year the *Future Problem Solving Program* presents problems for students to address such as hazardous waste disposal, overpopulation, and shrinking rainforests. The topics are written as scenarios taking place in the future. Students must look at the problem from many points of view, decide on the critical sub-problems, choose one to work on, and formulate a plan of action for dealing with it. Curriculum resources are provided with this program.

For inventive students interested in technology or drama, the *Odyssey of the Mind Program* presents challenging problems for students to solve. Problems include developing structures that hold up under pressure, designing vehicles with limited sources of power, and developing a dramatization that depicts a transformation. Curriculum resources are available for science, math, social studies, and English.

## Process

Educators agree that one of the goals of teaching students should be to develop thinking skills to the highest level; that is, those skills which reflect the dynamic, interactive relationship between the learner and the material, such as inquiry, problem solving, analysis, and synthesis. Glaser (1984) argues that not only can one not teach thinking skills in isolation from a knowledge base, but neither can a knowledge base be developed without an active, thoughtful engagement with the content.

Recent research on teaching and learning is helpful in the conceptualization of individual programming for students with gifts and talents. Specifically, it is important to consider both content (what the student learns) and process (the ways in which a student learns). Many educators believe that it is important to teach these two aspects of the instructional program as an integrated whole. Others believe that thinking processes are best learned



within the context of specific content, such as while learning about a topic or issue within a course of study. Further, processes learned in isolation of classroom activities are less likely to be transferred to authentic applications. If content and process are learned together, then students are better able to transfer what they have learned to other contexts, including real-life situations (VanTassel-Baska 1994).

Several authors have provided useful models for consideration. For example, while Edward deBono has been one of the proponents of teaching thinking skills separately and then embedding them in the content, his CORT program for students at the junior or high school level introduces 10 different thinking skills at each of five levels. As well, Tyler's *Just Think* (1982) and *Stretch Think* (1984) materials introduce CORT thinking skills to primary students. Ultimately, the goal is that students use these skills for deeper exploration of content. The thinking processes which are presented in this section include the following:

- thinking creatively
- thinking critically
- solving problems
- conducting research

## Thinking Creatively

The processes of **fluency**, **flexibility**, **originality**, and **elaboration** are associated with the development of creative thinking skills and strategies. These processes need to be incorporated in the development and implementation of programming options.

**Fluency** is the ability to generate many ideas. Bechtol and Sorenson (1993) define fluency as "thinking quickly and in quantity, generating a large number of ideas or possibilities, including relevant responses." Students learning this skill are required to tell what they know, to think of ideas for writing or speaking, and to think of ways to solve a problem. Question stems to promote fluency include the following:

- In what ways ... (e.g., *In what ways might we solve the recess problem?*)
- List ... (e.g., *List different forms of power.*)
- Brainstorm ... (e.g., *Brainstorm possible consequences of a global economy.*)

The principles of brainstorming are as follows:

- accept all ideas
- defer judgment
- record all responses
- encourage the elaboration, extension, and modification of the ideas of peers
- encourage the generation of as many ideas as possible

In today's world creativity is not just a nice thing to have. It is a grave necessity.

(Edgar Dale)

## Classroom Resources

*Odyssey of the Mind*,  
CM Association, Inc., P.O.  
Box 547, Glassboro, NJ  
08028

*Creative Problem Solving:  
An Introduction*  
(Treffinger, Isaksen and Dorval  
1994)

*Future Problem Solving  
Program*, W. Huron St.  
Suite 140-B, Ann Arbor,  
48103-4203

- provide an open, secure classroom environment (see Appendix J, *Brainstorming Techniques, Educational Problems-Solving Process*.)

Fluency may also lead to "selective comparison" (Davidson and Sternberg 1984) where one is able to relate new information to what is already known and to combine seemingly unrelated ideas in unique ways. Such synthesis is one aspect of original thinking, which is discussed below.

It takes courage to be creative. Just as soon as you have a new idea, you are a minority of one.

(Paul Torrance)

**Flexibility** requires generating a wide range of ideas that are the result of an alternative way of viewing a familiar concept or process. The question stem "How many different ways ..." encourages student flexibility. For example, "How many different ways can you find to measure the length of a room?" or, "List many different ways to produce a book review." Students categorize their ideas to examine how diverse their thinking actually is. If, for instance, in discussing "the effects of unemployment," students focus only on economic effects, then they need to consider other areas such as emotional, social, and political effects.

**Originality** refers to unique or unusual responses. Original responses usually occur at the end of an idea-finding activity, after the more obvious ideas have been produced. Question stems include the following:

- What is the most unusual idea ... way ...? (e.g., *What is the most unusual way to market our product?*)
- What if ...? (e.g., *What if we had no air travel?*)

The real questions are the ones that obtrude upon your consciousness whether you like it or not, the ones that make your mind start vibrating like a jackhammer, the ones that you 'come' to terms with only to discover that they are still there. The real questions refuse to be placated.

(Ingrid Bengis)

**Elaboration** requires adding ideas, providing details, extending thinking, or bringing an abstract concept to life. "What else ...?" is a question stem leading to inquiries like "What else do you see?" followed by a probe, "Tell me more." The students' own evaluation of their ideas is part of this process. It is through this evaluative process that students begin to consider the criteria which form the basis for their decision-making process.

When students use creative thinking skills and strategies to generate ideas, it is important to establish guidelines to keep the process moving and to create a safe environment for risk taking. One strategy that teachers might use to promote and enhance creative thinking is the SCAMPER technique. The SCAMPER technique (Eberle 1987) helps students move from one idea to another. When students use this strategy, they are better able to make new connections or extend their ideas. Students think about a topic of concern and ask: "To create a unique solution what might I ..."

- |             |                                                              |
|-------------|--------------------------------------------------------------|
| Substitute? | Who else? what else? what other place, routine, or practice? |
| Combine?    | Bring together, unite                                        |
| Adapt?      | Adjust, to suit a condition or purpose                       |

|                    |                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------|
| Modify?            | Alter, to change the form or quality                                                            |
| Magnify?           | Enlarge, to make greater in form, quality, or intensity                                         |
| Minimize?          | Make smaller, lighter, slower, less frequent                                                    |
| Put to other uses? | New ways to use                                                                                 |
| Eliminate?         | Remove, omit, or get rid of a quality, part, or whole.<br>What should be removed or simplified? |
| Re-arrange?        | Change order or adjust, different plan, layout or scheme                                        |
| Reverse?           | Place opposite or contrary, to turn it around, backwards,<br>upside down, inside out            |

## Thinking Critically

Critical thinking is the capacity to see relationships methodically. Learners can build this capacity within the context of the curriculum and in everyday life in their interactions with the world and with other people.

Through critical thinking students recognize relationships among the various issues they study across the curriculum, determine their own position on those issues, and distinguish their positions from those of their classmates and teacher. Learning experiences across the curriculum can assist students in developing habits of mind and attitudes that foster critical thinking. These habits of mind and attitudes include the following:

- being accurate and seeking accuracy—seeking precision
- being clear and seeking clarity
- seeking not only factual information but also an understanding of why things are as they are
- seeking and using good reasons for deciding what to believe or do
- using credible sources
- taking into account the total situation
- dealing in an orderly manner with parts of a complex whole
- maintaining/sustaining a focus—keeping their thinking relevant to the main point, keeping in mind the original or most basic concern
- evaluating statements (what they and others believe) and actions (what they and others do)
- being open-minded to others' points of view—seriously considering points of view other than their own, reasoning from starting points with which they disagree without letting the disagreement interfere with their reasoning, and withholding judgment when the evidence and reasons are insufficient
- restraining impulsiveness—not jumping to conclusions but basing action and belief on sound reasoning

- seeking alternatives
- taking a position when the information warrants it and changing a position when the evidence and reasons are sufficient for doing so
- being sensitive to the feelings, level of knowledge, and degree of sophistication of others

Thinking critically involves a number of processes. These include seeking clarity, establishing and making inferences, defining terms, and judging definitions.

**Clarity:** providing a focus for the critical thinking process, analysing lines of reasoning, seeking and providing clarification

- focussing on a question
  - identifying or formulating a question
  - identifying or formulating criteria for judging possible answers
- interpreting the meaning of terms and formulating clear definitions
  - defining terms
  - identifying and handling equivocation
  - identifying unstated and needed assumptions
- analysing arguments
  - identifying conclusions
  - identifying stated reasons
  - identifying unstated reasons
  - seeing similarities and differences
  - identifying and handling irrelevance
  - seeing the structure of an argument
  - summarizing
- asking and answering questions of clarification and challenge, for example,
  - Why?
  - What is your main point?
  - What do you mean by ... ?
  - What would be an example?
  - What would not be an example, but be close to one?
  - How does that case, which you seem to be offering as a counter-example, apply to this situation?
  - What difference does it make?
  - What are the facts?
  - Is this what you're saying, " ... "?

- Would you say more about that?

**Establishing a Sound Basis for Inference:** judging the credibility of sources of information, and making and judging the credibility of observations. This may include examination of the following considerations:

- expertise
- conflict of interest
- agreement with other sources
- reputation
- use of established procedures
- ability to give reasons

**Inference:** making and judging deductions, inductions, and value judgements. This includes

- generalizing
- explaining the evidence, checking consistency with known facts, eliminating alternative conclusions
- effectively investigating, designing experiments, including planning that controls variables, seeking evidence and counterevidence, seeking other possible conclusions
- examining relevance of background facts
- identifying consequences of proposed action
- considering and weighing alternatives

## Solving Problems

Many strategies and approaches can be used in problem solving. The creative problem-solving process is a strategy that can be used to examine real problems and issues. There are six stages to the model. Each stage requires a divergent phase (D) in which many ideas are needed and a convergent stage (C) in which decisions are made about the best ideas to move forward.

The process, initially developed by Parnes and Osborne, has been modified over the years so that it is more flexible. The following is from *Creative Problem Solving: An Introduction* (Treffinger, Isaksen, and Dorval 1994, 19) and illustrates the Problem Solving Process. All the stages do not need to be used with each problem. For example, when students are studying an environmental issue such as shrinking rainforests, gathering data and listing problems associated with the topic can be meaningful activities on their own. Later, students may choose one of the key problems to solve. While they may ultimately decide upon the best solution, they may or may not develop and implement a plan of action.

Problems cannot be solved at the same level of consciousness that created them!

—(Albert Einstein)

Among the critical skills required of the Canadian workforce is the ability to think critically and act logically to evaluate situations, solve problems, and make decisions.

—(The Conference Board of Canada 1998)

**If I were mayor** ... When a flyer announcing the "If I Were Mayor" contest arrived, Grade 2 teacher Louis Baines saw it as an opportunity to use the idea as a problem solving exercise. She presented the following scenario (mess) to her students:

You have just won the North Cowichan Mayoral election. You are filled with pride that people of this community chose you to be their mayor. You have great plans to improve the city. The class discussed the role of the mayor, what makes a good leader and what pressing problems face their town. Each student had a different set of ideas. The following are excerpts from Ian's written responses. Note that first he lists all of his ideas, then selects the most important idea(s), marks it with an asterisk and then moves the most important idea forward.

**Data Finding** - Some things a mayor is concerned about ... Electricity, power lines, taxes, parks, population growth, Pollution ...

**Problem Finding** - In what ways might I ... Lower the taxes. Stop cutting down trees. Stop pollution. Stop littering. Protect fish, beaches, and sea and wildlife.

**Idea Finding** - Ian decided protecting the local habitat was the most important problem. His ideas included: 1. Instead of making the pollution go up into the air—make it go down into the center of the earth. 2. Do your part. 3. Build a BIG wildlife preserve.

**Solution Finding** - Ian decided one of the criteria necessary to assess his idea would be whether or not the issue is important to the citizens of his community. He evaluated his solution by looking at its advantages, disadvantages and unique possibilities. Advantages included: animals can be seen, the Rod and Gun Club would help, and the Fish and Game Club would help. Limitations were: Loggers and the government might not agree. A unique potential was that he could fence the animals for people to see.

**Acceptance Finding** - First item on Ian's plan of action was to contact a realtor and buy lots of land. In one month he planned to hire a surveyor to map out the property. In three months he would contact volunteers to start working.

(Ministry of Education 1995)



| Divergent Phase                                                                                 |  | Convergent Stage                                                                            |  |
|-------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------|--|
| Understanding the Problem Component                                                             |  |                                                                                             |  |
| Mess Finding                                                                                    |  |                                                                                             |  |
| • seeking opportunities for problem solving                                                     |  | • establishing a broad, general goal for problem solving                                    |  |
| Data Finding                                                                                    |  |                                                                                             |  |
| • examining many details, looking at the mess from many viewpoints                              |  | • determining the most important data to guide problem development                          |  |
| Problem Finding                                                                                 |  |                                                                                             |  |
| • considering many possible problem statements                                                  |  | • constructing or selecting a specific problem statement (stating the challenge)            |  |
| Generating Ideas Component                                                                      |  |                                                                                             |  |
| Idea Finding                                                                                    |  |                                                                                             |  |
| • producing many, varied and unusual ideas                                                      |  | • identifying promising possibilities—alternatives or options having interesting potentials |  |
| Planning for Action Component                                                                   |  |                                                                                             |  |
| Solution Finding                                                                                |  |                                                                                             |  |
| • developing criteria for analysing and refining promising possibilities                        |  | • choosing criteria and applying them to select, strengthen and support promising solutions |  |
| Acceptance Finding                                                                              |  |                                                                                             |  |
| • considering possible sources of assistance/resistance and possible actions for implementation |  | • formulating a specific plan of action                                                     |  |

A useful resource to assist teachers in assessing student problem solving is Treffinger, Sortore, and Tallman (1992) as it outlines tools for observing, assessing, and evaluating student understanding and use of the creative problem solving process.

## Conducting Research

### *Questioning and Inquiry Skills*

Critical thinking is an active process not only of constructing questions and of making connections from the known to the unknown, but also of examining one's own thinking process. Questioning plays a key role in generating and developing ideas and in extending understanding, and as Rehner, *Practical Strategies For Critical Thinking*, (1994) states, "An effective learner is also an effective questioner." However, learning to question involves learning a variety of questioning strategies and being able to choose an appropriate strategy given a particular situation. In this work, Rehner (1994) suggests three specific strategies that help students to develop questioning skills:

#### **1. Making broad questions more specific (Learning to break down a broad question into its relevant and more specific parts)**

Example: The broad question What does the story mean? can be broken down into questions such as What happens in the story? Who are the chief characters? What are the key events or turning points? Are there key details or descriptions that the author emphasizes? What are the key relationships and conflicts in the story? How does the story relate to the course I'm taking or to other stories I've read? (Rehner 1994, 101)

#### **2. Generating questions when you fear you have none**

When students are attempting to generate questions, Rehner (1994) suggests testing "several different types of sequence questions that are general enough to begin this process but precise enough to be answerable." For instance, examining an issue from past, present, and future perspectives can be useful. Although students might know very little about the specific issue under investigation, questions might be generated concerning when the term or concept first began to be used, what its current meaning is, and how this meaning might influence future definitions. Such an evolutionary focus might yield information that can be used to generate more informed questions.

Another sequence suggested by Rehner (1994) is to encourage students to ask questions about the order in which the events happened. By organizing the material, philosophical and provocative questions such as, "Does reality determine imagination, or does imagination determine reality?" might emerge. A third sequence of questions that Rehner suggests is to encourage students to examine a topic, usually a controversial one, using the following sequence of words: "must, which suggests urgency; should, which is philosophical; can't, which highlights what is impossible to do; and shouldn't, which points to what is undesirable or ill-advised, ... [in order to examine] it from within certain boundaries." Barnes (1992) in Rehner (1994, 104)

### Classroom Resources

*Research Comes Alive*  
Guidebook for Conducting  
Original Research with  
Middle and High School  
Students  
(Schack and Starko 1998)

*Looking for Data in All the  
Right Places: A Guide for  
Conducting Original  
Research with Young  
Investigators*  
(Schack and Starko 1998)



Finally, questions that invite both positive and negative comparisons may be useful for students to ask. These questions can help students link their own lived experiences to the new information which they are trying to understand; for example, "How is a nation's debt like my own debt?" and "How is it not like my own debt?" (Rehner 1994, 104).

### 3. Using a checklist of questions to minimize errors in thinking

Rehner (1994) suggests that the metacognitive approach of asking questions of oneself results in a self-awareness of one's thinking patterns and is useful in the evaluation of the ideas themselves. "Two very common errors in thinking," claims Rehner, "are overlooking a crucial variable or piece of information and assuming that any answers we have worked out must be right". To lessen the effects of these errors, students can check their thinking periodically by asking themselves: "Is there more to this problem, issue, or situation than I am currently seeing?" and "Have I fairly considered other views or tried to generate alternatives?" (Rehner 1994, 105).

#### *An Inquiry-Based Model*

An inquiry-based model of curriculum as described by Wells and Chang-Wells (1992) enables learners to build upon their prior knowledge and experience by engaging in activities which they see as meaningful. Because the model encourages the use of existing understanding and the pursuit of answers to learners' authentic questions, it is responsive to the needs of individual students.

Wells and Chang-Wells (1992, 117) believe that "the construction of knowledge requires goal-directed engagement with new information, through direct experience and exposition, through discussion and deliberation with others, and through communing with self in writing and reading."

This inquiry-centred model is organized by broad thematic units of study. It may start with a whole-class activity in which students brainstorm what they already know and what questions they might wish to investigate. Within each of these units, individual students or small groups then make decisions about the specific topics for investigation based on their interests and on available resources.

Once the topics for study have been chosen, students are guided through three major stages of the inquiry process: research and inquire; compose and construct; present outcomes.

Through researching and inquiring, students collect information by reading, observing, experimenting, interviewing, and other such fact-finding activities. The information gathered must then be assembled, organized, interpreted, evaluated, and understood before it can be presented to others. Although each of these stages may be done sequentially, they may also interact in a cyclical fashion as the students gain an

understanding of the topic and work towards their presentation of what has been learned. Each of these stages of researching and inquiring, composing and constructing, and presenting outcomes involves the essential processes of goal setting, planning, doing, and reviewing. Reviewing may lead to revisions, which also involve goal setting, planning, and doing. As each stage also involves hypothesis testing and problem solving, students have an opportunity to use existing skills and to develop new ones.

This inquiry-based model gives students an opportunity not only for the development and practice of skills and processes, but also for affective engagement. It is this engagement that motivates students to participate in these authentic investigations.

### **Interviewing**

To support independent investigations students need to know where to obtain information, how to record ideas, and how to organize and report the outcomes of their work. In addition to researching using print materials and technology, interviewing and developing surveys should be considered.

#### *Interview preparation*

- Decide on the purpose of the interview and the type of information needed.
- Brainstorm possible questions and group together those which appear to be asking for the same information.
- Select the specific questions predicted to elicit the data needed for the research.
- Develop an order for presenting the questions.
- Decide how to analyse and evaluate the data.
- Brainstorm the steps in the procedure to gain and to arrange an interview.
- Select the important items and put them in a logical sequence.

#### *Role-play the interview*

Interviewing can be high risk for students. If they are well prepared and have had opportunities to rehearse the interview in advance and get feedback from their classmates, they will feel more secure. Working in teams for face to face interviews—with one person asking questions and another recording—helps to relieve some of the pressure associated with this process.

### **Surveying**

Surveying follows the same process as interviewing with these differences:

- Write the list of survey questions.
- Decide how to obtain responses. Yes or no responses? multiple choice? open ended?

- Select questions carefully.
- Field test the questions by trying them out on several volunteers.
- Rewrite questions until they are clear and provide data that can be sorted and analysed.

## Products

Products refer to the things students develop to show what they know. Developing products from investigations provides students with an opportunity to use their learning style strengths and personal preferences to represent their knowledge.

Examples of products that draw upon a variety of styles or intelligences include: models, diagrams, letters, videos, debates, displays, dramatizations, multimedia presentations, concept maps, stories, sculptures, paintings, songs, scripts, classification systems, and advertisements. Armstrong (1994) outlines products in relation to multiple intelligences and provides formats for organization and planning in this area.

Students take more care in developing their products when they are intended for audiences beyond the classroom. Products for real audiences include the following:

- letters to the editor and articles in the local newspaper
- student works displayed on a web page or published in children's magazines
- displays in public places—malls, banks, shop windows, parks, dentist/doctors' offices
- presentations to appropriate local groups. For example: city council, historical society, naturalists' society
- artistic performances for the public, for example senior citizens
- story telling in a library or bookstore, creation of oral history tapes for a library
- invention fairs
- televised student panel discussion of a community problem
- student business plans reviewed by business community
- dramatization of an issue for the community

## Learning Environments

An accepting environment that provides a safe and supportive atmosphere is important for all students. An environment that promotes group planning and problem solving can help students move from a teacher-directed atmosphere to one in which students accept responsibility for their own learning.

### Classroom Resources

*Multiple Intelligences in the Classroom*  
(Armstrong 1994)

*Seven Ways of Teaching*  
(Lazear 1991)

## Grouping for Instruction

Interacting with students who have similar learning needs and interests is important for students with gifts and talents. Small group activities provide opportunities for students with gifts and talents to collaborate. Groupings can be arranged in a variety of configurations. Teachers may form groups to work on specific curricular outcomes, to provide students interested in a specific topic an opportunity to work together, or to create an environment in which students can interact with peers who have similar learning needs.

Groups should be flexible in composition and duration. Group membership may be determined by the teacher or by students. Cross grade level grouping is useful for investigation of topics or themes and can extend learning opportunities. It can take place in single or multiple subject areas using a variety of grouping techniques. Clustering refers to grouping 2-5 students with gifts and talents in a grade level/subject area classroom. Through clustering within the classroom, students can work with differentiated curriculum on a continuous basis. In situations where there are sufficient numbers of students, part-time and/or full-time classes give students the opportunity to come together to learn and explore topics at a pace and complexity commensurate with their abilities.

## Mentoring

In meeting the needs of students, classroom teachers are encouraged to draw on the resources available in the wider educational community and the business community. Mentoring can be used to assist students in meeting their learning needs. Professionals and experts in a variety of fields can strengthen student interests and provide positive and exciting role models. Teachers, counsellors, librarians, other students, parents, and community resource people can become mentors. The relationship with a mentor can help students move to a new level of understanding. It is an opportunity for students to learn how experts in their field of interest go about their work. Internships can help the students experience the reality of work in a specific field. Mentors can provide stimulation and support beyond the classroom. Their encouragement and interest in students' pursuits also provide additional social and emotional support.

Schools can turn to their respective communities to partner in setting up mentorships, apprenticeships, and internships for students (See Appendix C-1, *Community Resources Survey*.) In addition, Internet provides access to a broad base of knowledge and expertise. Co-operative efforts among local universities, business and industry can forge unique opportunities. In communities where there is teacher training, pre-service teachers may be assigned as mentors. These teachers can obtain invaluable first-hand experience in learning how to plan and implement enrichment projects for students with gifts and talents (Gray 1983).

### Classroom Resources

*Cluster Grouping Fact Sheet: How to Provide Full-time Services for Gifted Students on Reasonable Budgets*  
(Winebrenner and Devlin 1994)

## Evaluation

There are many purposes for evaluation. Evaluation is a means of assessing the progress of student learning and of identifying areas for further learning and teaching. Evaluation can be an avenue for communication between teacher and students. It can be an avenue for recognizing achievements, for offering encouragement, and for developing understanding of how learning processes affect learning outcomes.

While it is important to encourage students to strive for accomplishment which may be reflected in marks or grades, it is also important to encourage students' enthusiasm for further learning and understanding of how future learning tasks might be approached.

(Clarke, Wideman and Eadie 1990)

The purpose for evaluation and the outcomes being evaluated must be central to the evaluation design. Student evaluation should not be narrowly defined as "testing." Rather it is the use of all available methods of obtaining information about what students know and are able to demonstrate. There is a role for both formal and informal evaluation in determining to what extent students are achieving learning outcomes. This means that evaluation will not only occur in written form, but also through observation and demonstration.

### Effective evaluation

- connects learning outcomes and evaluation
- relates the learning process to the methods of evaluation
- uses a variety of evaluation approaches that consider student strengths and needs
- makes use of both formal and informal evaluation
- is planned for the school year and shared with students and parents
- maintains accurate records that are meaningful to different audiences
- provides practical information
  - is appropriate for both small groups and individual students

Evaluation of student learning reflects the content (what the student learns,) the process (how the student learns,) and products (how the student shows what he/she knows).

Please see Options in Programing (p. 30) for more ideas on how to extend learning for all students.

Attention needs to be given to Gardner's work on multiple intelligences (MI) and to the diverse cultural backgrounds of students when deciding on evaluation approaches.

### Classroom Resources

*How to Mentor in the  
Midst of Change*  
(Sullivan 1992)

*Mentor Relationships  
How They Aid Creative  
Achievement, Endure,  
Change and Die*  
(Torrance 1984)

*Mentoring: An Annotated  
Bibliography (1982-1992)*  
(Noller and Frey 1994)

*Developing a Mentor  
Program*  
(Haeger and Feldhusen 1989)

"Ultimately, MI theory provides an assessment framework within which students can have their rich and complex lives acknowledged, celebrated, and nurtured. Because MI assessment and MI instruction represent flip sides of the same coin, MI approaches to assessment are not likely to take more time to implement as long as they are seen as an integral part of the instructional process. As such, assessment experiences and instructional experiences should begin to appear virtually indistinguishable. Moreover, students engaged in this process should begin to regard the assessment experience not as a gruesome "judgement day" but rather as another opportunity to learn" (Armstrong 1994, 131).

#### Classroom Resources

*Making the Grade*  
(Cornfield 1987)

*Together We Learn*  
(Clarke 1990)

*Assessing Student Performance*  
(Wiggins 1993)

Approaches to evaluation design and techniques are varied and numerous. Portfolios, conferences, peer evaluation, self evaluation, and individual contracts are particularly useful in the evaluation of student learning. Information on each of these techniques as well as a variety of approaches to assessment design can be found under Classroom Resources in this section.

## Professional Development

Everyone needs opportunities for self-renewal, but those responsible for developing other human beings need them most of all. Thinking deeply about what we are doing leads us to ask better questions, break out of fruitless routines, make unexpected connections, and experiment with fresh ideas.

(Brandt 1991)







# Professional Development

Teachers need and appreciate ideas, strategies, resources, and other forms of support in working with a diverse range of students. Some of this support emerges naturally within the school as teachers work collegially and share techniques and materials. Other contributions come from each teacher's reading, research, and experience.

Nevertheless, more formal professional development opportunities are valuable. Discussions with peers teaching the same subject or grade level in other schools facilitate learning and sharing. Workshops, mini-courses, school-based in-services, institutes, and university courses help teachers to further address their needs and interests regarding programming for students with gifts and talents.

The following areas are suggested as possible topics for professional development for teachers and principals in meeting diverse learning needs.

## Teachers

- identifying diverse learning needs in the classroom-observational strategies, information-gathering techniques, portfolio assessment
- understanding the intellectual, social/emotional needs of students
- involving parents in active and meaningful ways
- extending existing classroom teaching techniques and managing a classroom in which there is a wide range of learners
- differentiating instruction, inclusive teaching strategies
- developing individual program plans for students with gifts and talents
- supporting students in the classroom through reflective opportunities
- utilizing community resources
- understanding and implementing multiple intelligences theory and practice in the classroom
- grouping techniques
- questioning strategies

## Principals

- formulating the school's philosophy, goals, and objectives related to diverse learners
- communicating with the community
- providing professional development opportunities for teaching staff, school counsellors, and school psychologists
- supporting teachers' needs
- developing and implementing a plan for school-wide enrichment
- establishing program planning teams
- establishing networks among schools

Teachers need to have planning time to come together to share ideas, innovative teaching strategies, resources, etc. School boards may arrange to have teachers from similar grade levels or subject areas meet to develop learning extensions to the curriculum. Another venue through which ideas may be shared among colleagues is a district-wide newsletter or a home page on the Internet. These provide teachers with a format to share activities, resources, and innovative teaching strategies. Summer institutes and seminars allow for focussed and intensive professional development as well as time to reflect and share among peers.

## Positive Effective Behaviour Supports and Accountability

The Department of Education has begun a province-wide initiative to implement *Positive and Effective Behaviour Supports* (PEBS) in schools across the province. This school-wide system of behaviour supports is evidence-based and has been found to be effective in reducing incidents of inappropriate behaviour. During this school year, PEBS professional development workshops have been provided for 100 schools and the remaining Nova Scotian schools are scheduled to receive inservicing over the next three years.

The collection, analysis, and appropriate use of school incident data is a fundamental component of PEBS and an important means for helping to improve student conduct and academic achievement. In the fall of 2005, schools trained in PEBS will use the attached *Behaviour Incident Tracking Form* to collect, report and summarize data from office referrals. This data will inform decision making concerning effective behavioural supports in schools. At both the school and board level, aggregate data will also assist in planning for effective prevention and intervention programming for students, as well as for professional development activities. It will also provide information, provincially, on the effectiveness of the implementation and interventions at school level.



# The Impact of Inclusion on Students With and Without Disabilities and Their Educators

SPENCER J. SALEND AND LAUREL M. GARRICK DUHANEY

## ABSTRACT

This article reviews the literature with respect to inclusion programs and students with and without disabilities and their teachers. The findings of the studies reviewed cited indicate that: (a) the impact of inclusion programs on the academic performance and social development of students with disabilities has been mixed; (b) the placement of students without disabilities in inclusion programs does not appear to interfere with their academic performance and has several social benefits for these students; and (c) teachers' responses to inclusion programs are complex, are shaped by multiple variables, and change over time. The implications of the findings for students and educators involved in inclusion programs as well as the limitations of the studies cited are discussed.

THE MOVEMENT TOWARD INCLUSION HAS CREATED AN emphasis on educating students with disabilities in general education classrooms. Data from the U.S. Department of Education (1996) have indicated that approximately 73% of students with disabilities receive their instructional program in general education classrooms and resource room settings, and that 95% of the students with disabilities are served in general education schools. The recent reauthorization of the Individuals with Disabilities Education Act (P.L. 105-17) also includes general provisions that encourage the placement of students with disabilities in inclusive settings (Turnbull, Turnbull, Shank, & Leal, 1999).

Inclusion is a movement that seeks to create schools and other social institutions based on meeting the needs of all

learners as well as respecting and learning from each other's differences (Salend, 1998). Inclusionary schools seek to establish communities of learners by educating all students together in age-appropriate, general education classrooms in their neighborhood schools. Although the inclusion movement has focused on individuals with disabilities, it is designed to alter the philosophy for educating all students (Ferguson, 1996).

Although the concept of educating students with disabilities in general education classrooms is not new, its impact on students and educators continues to be examined and debated. This article examines these issues by reviewing the literature with respect to inclusion programs and their impact on students with and without disabilities and on general education (GE) and special education (SE) teachers. Although inclusion also significantly affects families of students with and without disabilities, which would make an interesting parallel to the other issues discussed, we decided not to address inclusion's impact on families because it was beyond the scope of this article. (For a discussion on families' perspectives on inclusion, see Bennett, DeLuca, & Bruns, 1997; Giangreco, Edelman, Cloninger, & Dennis, 1993; Gibb et al., 1997; Green & Shinn, 1994.)

## IMPACT ON STUDENTS WITH DISABILITIES

### *Academic Outcomes*

The impact of participation in inclusion programs on the academic performance of students with disabilities has been examined by numerous researchers. Reports from school dis-

tricts as part of a national study on inclusion suggested that placement in inclusion programs led to academic gains for students with disabilities, including improved performance on standardized tests, mastery of Individualized Education Program (IEP) goals, grades, on-task behavior, and motivation to learn (National Center for Educational Restructuring and Inclusion, 1995). These school districts also noted that placement in an inclusion program resulted in fewer incomplete assignments, more positive interactions with peers, and improved attitudes toward school and learning.

Waldron and McLeskey (1998) compared the reading and math performance of 71 elementary students with learning disabilities (LD) educated in an inclusion program to that of 73 students with LD who received resource room services. Although the findings indicated that the students with LD educated in the inclusion program showed significantly greater gains in reading than their peers who received resource room services, no significant differences were found between the two groups in terms of their progress in mathematics. Moreover, a significantly greater number of students with mild LD who were taught in inclusive settings progressed in reading at a rate that paralleled their grade-level peers without disabilities than did the students with mild LD who attended resource room programs. However, there were no significant differences in the reading and math progress of students with severe LD across the two settings.

Banerji and Dailey (1995) used quantitative and qualitative research methods to study the effect of an inclusion program on the academic skills of 13 elementary students with LD and 17 of their average-achieving classmates. Academic performance measures in reading and writing were collected after students had been in the inclusion program for 3 months. The results revealed that the reading and writing progress of the students with LD was similar to the progress of their peers without disabilities.

Baker and Zigmond (1995) conducted five case studies to investigate the effects of inclusive placements on students with LD. The case studies were conducted in elementary schools in five different states and included one urban school, two suburban schools, and two rural schools. Each school employed its own model for implementing inclusion and differed in terms of such variables as the provision of leadership, the motivation to restructure services, the selection of school staff to participate, the distribution of students with disabilities into GE classes, and the provision of SE services to students. Baker and Zigmond found that, although these inclusion programs provided students the opportunity to benefit from good general education programs, the students with disabilities were not provided with "specially designed instruction" (p. 178) to meet their academic needs.

Data collected on more than 8,000 students with disabilities in Grades 7 through 12, whose ages ranged from 13 to 21, as part of the National Longitudinal Transition Study (NLTS) also addressed the impact of access to and time spent in inclusive settings on secondary students with disabilities (SRI International, 1993; U.S. Department of Education, 1995).

These data revealed that many secondary students with disabilities, especially in the ninth and tenth grades, experienced high rates of failure (e.g., failing report card grades). However, these data also showed that secondary students with disabilities, particularly with physical disabilities, who took a greater number of GE courses were more likely to (a) attend postsecondary academic programs; (b) obtain employment and earn higher salaries; (c) live independently; (d) be socially integrated into their communities; and (e) be married or engaged. However, these findings are open to multiple interpretations, as it is possible that students with disabilities who enroll in more GE classes are more socially and academically skilled and that these skills contribute to their likelihood for success after they leave school, rather than their experiences in inclusion programs.

Several studies have compared the academic impact of inclusion programs with that of other models for delivering educational services to students with disabilities. Marston (1996) used curriculum-based assessment measures collected throughout the school year to compare the reading progress of 240 elementary-level students with LD who were educated in three different instructional models: inclusion only, combined services, and pull-out only. Thirty-three of the students were educated in an inclusion-only program, in which the special and general educators worked collaboratively to deliver instruction in the GE setting. Thirty-six students were placed in a combined services program, in which the special and general educators collaborated to offer students with disabilities instruction in the GE classroom, which was supplemented by instruction in the resource room from the SE teacher. One hundred seventy-one students were in the pull-out-only condition, in which students with disabilities left the GE classroom to receive instruction from an SE teacher who did not formally collaborate with the students' GE teacher. The findings revealed that the students in the combined services program had significantly greater gains in their reading performance than the students who received instruction in either the inclusion-only classroom or the pull-out-only program.

Manset and Semmel (1997) reviewed 11 studies addressing the academic outcomes associated with eight different models that employed schoolwide interventions to educate students with mild disabilities in GE classrooms. Although methodological problems limited the conclusions regarding the efficacy of inclusion programs versus pull-out programs, Manset and Semmel concluded that

the evidence presented does suggest that inclusive programs for some students with mild disabilities can be an effective means of providing services, but the evidence clearly indicates that a model of wholesale inclusive programming that is superior to more traditional special education service delivery models does not exist at present. (p. 178)

Similarly, in a review of the outcomes of three different inclusion programs, Zigmond et al. (1995) reported that approxi-



mately 50% of the students with disabilities in these programs failed to show evidence of increased academic performance.

Several studies have examined the academic performance of students with disabilities who have been reintegrated into GE classrooms. Shinn, Powell-Smith, Good, and Baker (1997) used curriculum-based measurements (CBM) to investigate the reading achievement and progress of students with disabilities who were reintegrated into GE classrooms for reading instruction for a 12-week period. The findings revealed that the students' academic gains paralleled the gains made by their low-reading classmates without disabilities. In a similar study, Fuchs, Fuchs, and Fernstrom (1993) compared the pre- and posttest CBM mathematics scores of an experimental group of students with disabilities reintegrated into GE classrooms for a 5-month period with those of a control group of students who attended a resource room program. The results indicated that the reintegrated students demonstrated more gains than their peers in resource room programs and achieved at a level that was commensurate with their low-achieving classmates without disabilities.

Using data collected by the Michigan Department of Education from 1989 to 1993 and interviews with teachers and counselors, Carlson and Parshall (1996) studied the academic adjustment of 51,624 students with disabilities who were reintegrated into GE classrooms. The findings indicated that (a) most of the reintegrated students received good grades; (b) 11% of the reintegrated students needed to continue to receive SE services; and (c) 4% of the reintegrated students did not succeed in the GE setting and returned to SE.

### ***Social Outcomes***

In addition to examining the impact of placement in the GE setting on the academic performance of students with disabilities, studies also have been conducted to examine the noneducational, social, and self-concept outcomes for students with disabilities educated in inclusive settings. Evans, Salisbury, Palombaro, Berryman, and Hollowood (1992) used classroom observations, sociometric analysis, and social competence ratings to study the peer interactions and social acceptance of eight students with severe disabilities and eight randomly selected students without disabilities educated together in elementary classrooms. Data collected by classroom observations revealed that interactions between the two groups of students were more often initiated by students without disabilities, and that although these interactions included some elements of play, talking, and physical affection, they tended to be assistive in nature. The observation results also indicated that, although the number of social interactions between students with and without disabilities declined as the school year progressed, the interactions that did occur tended to be more natural. Sociometric data revealed that, although several of the students with disabilities were very popular, others were not particularly popular. The findings also indicated that the acceptance of the students with

disabilities was not associated with either their social competence or the number of social interactions initiated or received, which caused the researchers to conclude that students with severe disabilities may be judged differently than their peers without disabilities.

Fryxell and Kennedy (1995) used a posttest-only control group design with matched comparisons to contrast the social relationships of nine students with severe disabilities educated in GE classrooms and nine students with severe disabilities who received their educational program in a self-contained SE class. Both groups were matched in terms of gender, age, disability category, social and communication skill levels, and years in attendance at their current schools. Based on data collected using an educational quality indicators rating scale, the researchers established that the two educational programs were equivalent with respect to staffing, systematic instruction, classroom management, transdisciplinary service delivery, and family/school partnership; the programs differed only in terms of GE participation. The researchers used direct observations of students and interviews with targeted students and their teachers to measure the students' social relationships in the two different placements. The results revealed that the students with severe disabilities educated in GE classrooms had more social contacts and richer friendship networks that included peers without disabilities and provided and received more social support than their peers who were educated in self-contained classrooms.

Using a similar research design and procedures, Kennedy, Shukla, and Fryxell (1997) compared the impact of educational placement on the social relationships of intermediate school students with severe disabilities educated in inclusion classrooms ( $n = 8$ ) and SE classrooms ( $n = 8$ ). The findings revealed that the students who were educated in inclusion classrooms had a greater number of interactions and social contacts with students without disabilities, were the recipients of and provided greater levels of social support behaviors, had larger friendship networks that mostly included classmates without disabilities, and had more lasting social relationships with students without disabilities.

Vaughn, Elbaum, and Schumm (1996) assessed the effects of inclusive placements on the social functioning of 16 students with LD, 27 low-achieving (LA) students, and 21 average/high-achieving (AHA) students. All three groups of students were assessed on various measures of social functioning during the first part and at the end of the school year. The social functioning measures included peer ratings of liking, self-concept, loneliness, and social alienation. The findings revealed that (a) the degree to which students in all three groups were liked by their peers declined over time; (b) the peer acceptance of the AHA students was higher than the acceptance of both the LD and LA students; (c) the self-concept scores of all three groups were similar with respect to such variables as appearance, friendship, and self-worth; (d) the students with LD had lower academic self-concept scores over time; (e) the students with LD developed a greater number of reciprocal friendships with other students, which included students from

all three groups; and (e) the ratings of loneliness of all three groups were similar. Furthermore, interviews with GE and SE teachers indicated that they felt that the inclusion placement resulted in improvements in the self-concepts of the students with LD.

Banerji and Dailey (1995) examined the impact of placement in an inclusion classroom on the affective performance of 13 elementary students with LD and 17 of their nondisabled classmates. Affective performance indicators relating to attitude toward school, motivation, and self-concept were collected through a survey that students completed at the end of the year. The findings revealed that the two groups of students did not noticeably differ in terms of the affective outcomes surveyed. Surveys completed by teachers and parents and anecdotal information indicated that students with LD had improved levels of self-esteem and motivation and that their behavior resembled the behavior of their classmates without disabilities.

Sale and Carey (1995) used a positive and negative peer nomination strategy to assess the sociometric status of students with disabilities who attended an inclusive elementary school. The elementary school, which served predominately White students from upper socioeconomic backgrounds, was structured so that all students with disabilities (currently eligible;  $n = 37$ ) and those suspected of having disabilities (likely eligible;  $n = 29$ ) received their instruction in GE classrooms. Although the disability categories of the students attending the school varied (e.g., students with emotional, physical, or sensory disabilities), the majority of students were classified as having LD. The researchers conducted positive and negative peer nomination interviews in which they asked students to identify the three students in their class whom they liked the most and the three students whom they liked the least and to give the reasons for their selections. The findings revealed that the currently eligible and likely eligible students were less likely to be nominated as most liked and more likely to be nominated as least liked than their peers. When currently eligible and likely eligible students were compared, the results indicated that likely eligible students received more negative peer nominations than students with identified disabilities.

Roberts and Zubrick (1992) used a correlational design to compare the social status of 97 elementary students with mild disabilities who were partially or fully integrated into GE classes and 97 GE students without disabilities who were their classmates. Data were collected to assess the peer perceptions, social status, and attending and disruptive behaviors of both groups of students as rated by their peers. The findings revealed that, although both groups of students were rated as equal in terms of their disruptive behavior, the students with mild disabilities were less often accepted and more often rejected than their classmates without disabilities. The results also indicated that, although the social rejection and acceptance of the students with disabilities seemed to be related to their peers' perceptions of their disruptive behavior, the social rejection and acceptance of their classmates

without disabilities tended to be related to peer perception of their academic behavior.

Bear, Clever, and Proctor (1991) studied the impact of class placement on the self-perceptions of 52 third-graders with LD in integrated classes, 163 third-graders without disabilities in integrated classes, and 124 third-graders without disabilities who were not educated in integrated classes. In April or May, students in all three groups completed the Self-Perception Profile (SPP; Renick & Harter, 1989), a self-evaluation scale designed to measure global self-worth, scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct. The findings revealed that the students with LD had significantly lower self-perceptions in the domains of global self-worth, scholastic competence, and behavioral conduct than their peers without disabilities who were educated in the same integrated classes.

Whereas the studies cited above addressed the impact of inclusive settings on the social outcomes of students with disabilities, these studies did not examine the effectiveness of interventions designed to enhance the social interactions and acceptance of students with disabilities educated in inclusive settings. Recognizing the need for such studies, Hunt, Alwell, Farron-Davis, and Goetz (1996) used a multiple baseline design to assess the efficacy of a package of intervention strategies designed to facilitate social relationships between three elementary-level students with sensory, physical, and cognitive disabilities and their GE classmates without disabilities. The intervention package implemented by the educational staff included (a) providing information to classmates without disabilities regarding the ways the students with disabilities communicate, (b) facilitating social interactions by employing interactive activities, buddy systems, and prompting, and (c) interpreting the behaviors of the students with disabilities. The results revealed that the intervention package led to an increase in the number of reciprocal interactions between the students with disabilities and their classmates and to a decrease in the number of assistive behaviors engaged in by the educational staff. The findings also indicated that the interventions resulted in an increase in the number of social interactions initiated by the students with disabilities. Follow-up interviews with nine classmates without disabilities and with the students' three GE teachers revealed that the students identified themselves as friends of the students with disabilities, and that the teachers and students believed that the various components of the intervention package contributed to the development of friendships between both groups of students.

### *Attitude Toward Placement*

Several studies have been conducted that assess the impact of inclusion programs on students with disabilities by surveying and interviewing students concerning their preferences regarding service delivery as well as their experiences in GE and SE settings. As part of a larger study on students' preferences for service delivery, Jenkins and Heinen (1989) interviewed 101



second-, fourth-, and fifth-grade SE students and 236 remedial education students concerning the locations in which they preferred to receive specialized instruction. The students attended classrooms in 15 schools that offered specialized instruction using a pull-out, in-class, or integrated model. Although the majority of students indicated a preference for receiving additional assistance from their GE teachers, the results also revealed that students generally preferred the type of SE program they were presently receiving. Jenkins and Heinen also found differences based on age, with more older students preferring a pull-out program than their younger peers, in part because the older students viewed pull-out programs as less embarrassing than inclusion programs.

Padeliadu and Zigmond (1996) used structured interviews to examine the perspectives of 150 elementary-level students with LD regarding their SE placement. The results indicated that the students felt the SE setting to be a supportive, enjoyable, and quiet learning environment in which they could receive the academic assistance and extra help they needed. However, the students also expressed some anxiety over the academic and recreational activities they were missing while they were pulled out of their GE classes.

Reid and Button (1995) used interviews and narratives depicting the personal school-based experiences of six sixth- and seventh-grade students with LD. An analysis of the transcripts revealed several themes including feelings of anger and frustration associated with being isolated from classmates in an SE classroom, of victimization as a result of being the targets of physical attacks, name-calling, and ridicule from classmates and teachers, and of being misunderstood, betrayed, unappreciated, and oppressed by teachers, classmates, and family members. In a similar study, Albinger (1995) analyzed the results of open-ended interviews with five elementary students with LD who received resource room services. The students' responses indicated that, although they liked coming to the resource room for individualized assistance, they perceived the experience of exiting their GE classroom to receive specialized services as an embarrassing situation that created the need to fabricate stories to justify to their friends why they were leaving class. The students also reported that they were targets of name-calling, and that they were concerned about completing work in their GE classroom that was assigned while they were in the resource room.

Guterman (1995) employed unstructured individual and group interviews to examine the perceptions and experiences of nine high school students with LD who received their educational program in a self-contained SE class. The students' initial SE placement made them feel concerned about their status and the loss of their friends as well as stigmatized and personally deficient. The students also reported that they perceived the academic instruction they received in their SE classroom as low-level, not related to their lives, repetitive, unchallenging, and ineffective. The respondents also expressed negative attitudes toward inclusion, which were based on their previous negative experiences in GE settings that included encounters with teachers who failed to adapt instruction to meet their unique learning needs. The students also consid-

ered inclusion unrealistic, because they felt that it was unreasonable to ask their GE teachers to adapt instruction to their learning needs and that such instructional modifications would result in their being stigmatized in the presence of their peers.

### Summary

In summary, the studies reviewed reveal that the impact of placement in inclusive settings on academic and social performance and on attitude toward placement of students with disabilities has been varied. Studies have reported that placement in inclusion programs has resulted in improved educational outcomes for students with disabilities, including improved standardized test scores, reading performance, mastery of IEP goals, grades, on-task behavior, motivation to learn, and greater success in making the transition to adulthood. However, other studies indicated that students with disabilities educated in inclusive settings did not receive specially designed instruction to meet their educational needs. Furthermore, studies comparing the various models for delivering educational services to students with disabilities indicated that, although inclusion programs can be effective service delivery systems for meeting the educational needs of some students with mild disabilities, other students with mild disabilities perform better academically when they receive their educational programs through traditional SE service delivery models such as a pull-out resource room program.

Several studies have used observations and sociometric techniques to examine the social interaction patterns between students with severe disabilities and their classmates without disabilities. Although some studies found that students with severe disabilities in inclusion programs interact with others more often, receive and offer increased levels of social support, and develop more long-lasting and richer friendships with their GE peers, research also indicated that these interactions are often assistive in nature, and tend to decline as the school year progresses.

Other studies have employed rating scales, surveys, and interviews to assess the effects of inclusive placements on the social functioning of students with mild disabilities. Although some studies report that students with mild disabilities educated in inclusion programs develop reciprocal friendships with other students, have self-concepts and attitudes toward school measures that are similar to those of their classmates without disabilities, and are rated as equal of their peers without disabilities in terms of disruptive behavior, other studies indicate that they are less often accepted and more often rejected by their classmates without disabilities and that they have lower self-perceptions than their peers without disabilities.

Several studies have examined the impact of inclusion programs on students with disabilities by surveying and interviewing them concerning their preferences regarding service delivery as well as their experiences in GE and SE settings. Although research has indicated that some elementary students consider the individualized services they receive in an SE classroom to help them academically, students also were

concerned about the recreational and academic activities they are missing when they are pulled out of their GE classrooms. Elementary students with disabilities also reported that leaving the GE classroom for specialized services was embarrassing for them and caused them to be targets of name-calling and ridicule from their peers. Interviews with secondary-level students with disabilities indicated that they had negative experiences in both general and special education. Negative experiences in GE related to the failure of their teachers to adapt instruction to meet their needs and to the fear that their special accommodations resulted in their being stigmatized in the presence of their peers. Negative experiences in SE included receiving low-level, repetitive, and unchallenging academic instruction; being concerned about their status and the loss of friends; and feeling stigmatized.

## IMPACT ON STUDENTS WITHOUT DISABILITIES

### *Academic Outcomes*

An important factor in considering the effectiveness of inclusion programs is the effect of the program on the academic and social behaviors of students without disabilities. Hollowood, Salisbury, Rainforth, and Palombaro (1994) investigated the impact of the placement in an inclusion classroom on the amount of instructional time and teacher attention that students without disabilities received. The researchers collected and compared data related to actual and allocated instructional time for six students without disabilities who were educated in classes that included students with severe disabilities and for six students without disabilities who were taught in noninclusion classes. The results revealed that the placement of students with severe disabilities in inclusive classrooms did not have a significant effect on the amount of allocated or engaged instructional time devoted to their peers without disabilities. Hollowood et al. also found that the rates of interruptions to planned instructional activities were similar in both types of classes.

Sharpe, York, and Knight (1994) used a pretest-posttest research design to examine the impact of being educated in an inclusive classroom on the academic performance of elementary students without disabilities. They contrasted measures of academic performance for 35 students who attended classrooms that included 2 students with significant disabilities with the academic performance and behavior of their peers without disabilities who were taught in classes that did not include students with moderate or significant disabilities. The findings indicated that there were no significant differences between the two groups on measures of academic performance and behavior that included the Science Research Associates Assessment Survey (Science Research Associates, 1975), the Houghton Mifflin (1982) reading series, and the students' report card grades for reading, mathematics, spelling, and effort.

Hunt, Staub, Alwell, and Goetz (1994) used a pretest-posttest design to compare the achievement of targeted mathematics objectives of 10 students without disabilities who

participated in cooperative learning groups with their classmates with disabilities with a control group of 10 students without disabilities who were members of cooperative learning groups that did not include students with disabilities. The results revealed that both groups significantly increased their mastery of the targeted mathematics objectives and that students without disabilities who participated in cooperative learning groups with students with disabilities performed as well as the students without disabilities in the control group.

Saint-Laurent et al. (1998) examined the academic impact of placement in an inclusion program on third-grade students without disabilities. The researchers compared the reading, mathematics, and writing performance of 209 students without disabilities who were educated in an inclusion program and 232 students without disabilities who were educated in a traditional GE classroom not including students with disabilities. The findings revealed that the reading and mathematics performance of the students without disabilities in the inclusion program was significantly better than that of their peers who were educated in the traditional GE program. However, there were no significant differences in the writing performance of the two groups.

### *Social Outcomes*

Research addressing the social impact of inclusion programs on students without disabilities also has attempted to examine the perspectives and experiences of elementary, middle school, and high school students without disabilities in inclusion programs. Biklen, Corrigan, and Quick (1989) interviewed elementary-level students without disabilities whose ages ranged from 9 to 11 concerning their experiences in inclusive settings. These students' responses indicated that they felt that inclusion programs helped them to understand individual differences in physical appearance and behavior, the connection between their experiences and the feelings of students with disabilities, and the worth of their peers.

Staub, Schwartz, Gallucci, and Peck (1994) used classroom observations, videotape recordings, and semistructured interviews to study the relationship between four elementary-level students without disabilities and four students with moderate and severe disabilities who were educated in the same GE classroom. The findings indicated that the friendships satisfied some of the personal needs of the students without disabilities, including being viewed as important; recognizing one's strengths; finding companionship, security, and comfort; and being consistent with the values of one's family. However, although all four friendships originated during noninstructional activities, as the friendships developed three of the students without disabilities assumed a caretaking role that was encouraged by their teachers and teacher aides.

Capper and Pickett (1994) conducted focus group interviews with 46 students who attended a traditionally structured school and 46 students who attended an inclusive school to compare the effects of a noninclusion-based school and an inclusion-based school on middle school students' perspectives of diversity and inclusion. They reported that students at

the inclusion-based school showed an increased acceptance, understanding, and tolerance of individual differences. In contrast, the students attending the noninclusion school were more likely to engage in stereotyping and held more negative perceptions of diversity and students with disabilities.

York, Vandercook, Macdonald, Heise-Neff, and Caughey (1992) surveyed 181 middle school students without disabilities concerning their reactions to being in inclusion classes with students with severe disabilities. The findings indicated that these students (a) overwhelmingly felt that inclusion was a good idea; (b) believed that being in GE classrooms resulted in positive outcomes for students with disabilities, particularly in terms of social and interpersonal skills; and (c) developed more realistic and positive perspectives concerning their classmates with disabilities.

Hendrickson, Shokoobi-Yekta, Hamre-Nietupski, and Gable (1996) surveyed 1,137 middle and high school students without disabilities regarding their friendships with peers with severe disabilities. The results revealed that the students without disabilities were willing to form friendships with their peers with severe disabilities and believed that inclusion facilitated the development of such friendships. The students also suggested several strategies for promoting friendships among students, including using cooperative grouping arrangements, sharing information about disabilities, and implementing social activities that promote interactions between students.

Murray-Seegert (1989) used ethnographic research procedures to examine the social relationships between high school students without disabilities and their peers with disabilities during a 1-year period. The students without disabilities reported that their experiences in inclusive settings had several benefits for them, including learning from their classmates with disabilities, experiencing positive feelings as a result of supporting another individual, and being better able to deal with disability in their own lives.

Helmstetter, Peck, and Giangreco (1994) administered a survey to 166 high school students without disabilities to investigate their perceptions of their relationships with students with moderate and severe disabilities. The results indicated that they perceived their friendships with students with disabilities as beneficial in terms of increased personal growth, acceptance of others, and human diversity. Some of the students without disabilities also reported that the communication difficulties of their peers with moderate and severe disabilities were a barrier that interfered with their relationships.

Peck, Donaldson, and Pezzoli (1990) conducted semi-structured interviews with 21 high school students without disabilities regarding their social relationships with classmates with moderate and severe disabilities. The findings showed that, although students without disabilities felt that they had improved in the areas of self-concept, social cognition, acceptance of others, advancement of individual principles, and tolerance of human differences, they also experienced discomfort with the lack of social skills displayed by students with moderate and severe disabilities.

Some students also reported initial discomfort with the physical appearance and behavioral characteristics (e.g., coughing and drooling) of some students with disabilities, which tended to decrease over the school year.

### Summary

The studies reviewed reveal that placement in an inclusion classroom does not interfere with the academic performance of students without disabilities with respect to the amount of allocated and engaged instructional time, the rate of interruptions to planned activities, and the students' achievement test scores and report card grades. The results of these studies also indicate that students without disabilities possess positive views of inclusion and believe that inclusion benefits them in terms of an increased acceptance, understanding, and tolerance of individual differences; a greater awareness and sensitivity to the needs of others; greater opportunities to have friendships with students with disabilities; and an improved ability to deal with disability in their own lives. Concerns about being in an inclusion classroom related to the communication difficulties and physical and behavioral characteristics of some of the students with disabilities.

## IMPACT ON EDUCATORS

### Attitudes Toward Inclusion

Because the cooperation of educators is critical to the success of inclusion programs, several studies have investigated the reactions of general and special educators toward inclusive education. Scruggs and Mastropieri (1996) used research synthesis procedures to summarize the results of 28 studies examining GE teachers' perceptions of inclusion. The findings revealed that, although about two thirds of the general educators supported the placement of students with disabilities in GE classrooms, only one third or fewer of the teachers reported that they had the time, expertise, training, or resources to implement inclusion effectively.

Several researchers have examined educators' attitudes toward educating students with disabilities in GE settings by surveying their agreement with statements that relate to the principles on which inclusion programs are based. Coates (1989) surveyed 88 kindergarten to twelfth-grade GE teachers regarding their views of the Regular Education Initiative (REI) and the use of pull-out programs to serve students with disabilities. The findings revealed that GE teachers not only believed in the effectiveness of resource rooms but also supported their expansion to serve students who were not certified to receive SE services. The teachers also expressed skepticism about whether students with mild disabilities could be educated in GE classrooms even with additional teacher training and support (e.g., curriculum consultant, SE consultant). In a related study, Semmel, Abernathy, Butera, and Lesar (1991) surveyed 311 GE and 70 SE teachers about their



perceptions and opinions concerning the REI. The results revealed that a majority of educators surveyed were satisfied with a pull-out system for delivering SE services and believed that full-time placement of students with mild disabilities in GE classrooms would not be socially or academically beneficial. Although most of the teachers felt that the reallocation of SE resources to GE classrooms would lighten their instructional load and benefit all students, they were protective of the resources designated for students with disabilities.

Soodak, Podell, and Lehman (1998) surveyed 134 (71.3%) elementary, 34 (18.1%) middle, and 20 (10.6%) high school GE teachers concerning their affective responses to inclusion, as well as the factors that related to these responses. Of the 188 teachers surveyed, 67 (35.6%) taught in classrooms that included students with disabilities. The findings revealed that teachers' responses to inclusion are complex and influenced by a variety of factors. In terms of teachers' affective responses to inclusion, the researchers distinguished two types of responses, hostility/receptivity and anxiety/calmness. Furthermore, the findings indicated that both types of responses were related to teacher attributes, student disability categories, and school-based conditions. Teachers who possessed low teaching efficacy (i.e., teachers' beliefs about the impact of their teaching), who lacked experience in teaching, or who had low use of differentiated teaching practices and teacher collaboration were found to be less receptive to inclusion. Whereas the teachers reported that they felt threatened by the inclusion of students with cognitive disabilities (e.g., mental retardation) and frustrated by the inclusion of students with LD or behavior disorders, they were more receptive to the inclusion of students with physical disabilities or hearing impairments. With experience, teachers became less receptive to the inclusion of students with LD. However, with respect to the anxiety/calmness dimension, the teachers reported less anxiety toward the inclusion of students with learning or behavior problems than toward the inclusion of students with other disabilities. Measures of teachers' personal efficacy (i.e., teachers' beliefs about their own effectiveness) correlated with less anxiety about inclusion, and collaboration among teachers was also found to lessen teachers' anxiety about inclusion. Not surprisingly, larger class sizes were found to heighten teachers' anxiety about inclusion.

### **Implementation Concerns**

In addition to studying educators' attitudes toward various tenets associated with inclusion, researchers also have examined the experiences and perceptions of educators working in inclusive settings. Giangreco, Dennis, Cloninger, Edelman, and Schattman (1993) conducted semistructured interviews to investigate the experiences of 19 kindergarten through ninth-grade GE teachers who had taught a student with severe disabilities. The interviews were followed by a survey that asked the teachers to rate the extent to which their attitudes toward inclusion had changed. They also were asked to rate their willingness to have a student with significant disabilities

in their classroom in the future. Although two of the teachers reported no change from their initial negative feelings toward inclusion, the results of the interviews and survey data indicated that most of the teachers (17 out of 19) experienced a change that resulted in positive attitudes toward the placement of students with severe disabilities in their classrooms. The interviews with the teachers suggested that this change in attitude was related to seeing how the effective instructional adaptations that they instituted for students with disabilities benefited all students. The change also included increased ownership and willingness to interact with students with disabilities, enhanced knowledge of ways to teach students with disabilities, and changed attitudes toward the placement of a student with significant disabilities in their classroom. The teachers also identified other personal benefits of inclusion, such as a greater awareness of the impact of teachers as positive role models for students, an increased feeling of confidence and pride in their ability to teach and be open to change, and a growing willingness to modify their instructional techniques to promote the learning of all students in their class.

Downing, Eichinger, and Williams (1997) conducted structured interviews with nine general educators, nine special educators, and nine principals concerning their views of and experiences with inclusive programming for elementary-level students with severe disabilities. The respondents worked in three different types of educational programs: full inclusion, partial integration, and no inclusive educational experiences with elementary students with severe disabilities. Although all groups had positive views of inclusion and felt that inclusion was a good use of district resources, they identified the negative attitudes of GE and SE teachers and parents and the limited availability of financial resources as barriers to the implementation of inclusion. General educators expressed the concern that meeting the needs of students with disabilities created an added demand on teachers' time and attention, thus limiting their ability to address the needs of students without disabilities. The concerns of special educators related to their perceived loss of control over the classroom environment and their job functions.

Villa, Thousand, Myers, and Nevin (1996) surveyed 578 GE and 102 SE teachers and administrators working in inclusion programs to examine their perceptions of the inclusion of all students, particularly students with moderate and severe disabilities in GE classrooms. The results indicated that the respondents preferred inclusion programs in which educators worked collaboratively to serve all students in GE classrooms over pull-out programs. Respondents believed that the following variables were robust predictors of positive attitudes toward inclusion of all students with disabilities in GE classrooms: collaborative consultation, co-teaching partnerships, shared accountability for educational outcomes, level of preservice and inservice training, and administrative support.

York et al. (1992) surveyed 11 general educators and 7 special educators who worked in integrated middle school settings concerning various aspects of educating middle school

students with severe disabilities in inclusive classrooms. Both groups of respondents indicated that inclusion resulted in positive outcomes for GE and SE teachers. Positive outcomes for GE teachers included getting to know new colleagues, being more receptive to and skilled at integrating students with disabilities in their classes, and being better able to meet the needs of their students without disabilities who were experiencing difficulty in school. Positive outcomes for SE teachers included an increased feeling of being an important part of the school community, an enhanced perspective on education and knowledge of the GE system, and a greater enjoyment of teaching related to working with students without disabilities and observing the successful functioning of their students with severe disabilities in inclusive settings. General and special educators also reported that a high level of communication between educators was an important component of successful inclusion.

As part of a larger study, York and Tundidor (1995) conducted focus group discussions with 191 general and special educators, administrators, and support staff who worked in elementary and secondary schools in a midwestern urban community to examine issues and barriers related to the implementation of inclusive education. The issues and barriers identified by the participants included the negative attitudes held by staff members and students without disabilities, the concern that the education of students without disabilities might suffer, and the inability of the GE staff to address the severe health and medical needs and behavioral challenges of students with disabilities. Other perceived barriers to inclusion were the lack of funds to support personnel and instructional needs, the rigid requirements associated with the GE curriculum, and the limited amount of time for collaboration and communication among staff members.

A survey was conducted by Werts, Wolery, Snyder, Caldwell, and Salisbury (1996) to identify 1,430 elementary teachers' perceptions regarding the need for and availability of supports and resources associated with inclusive schooling. Respondents' ratings were separated into three groups: teachers who did not teach students with disabilities, teachers of students with mild disabilities, and teachers with students with more severe disabilities. All three groups of respondents reported having similar levels of resources and supports available to them. The responses of the two groups of teachers of students with disabilities indicated that their need for most resources and supports exceeded their availability, with a greater percentage of the teachers of students with severe disabilities indicating a greater need for resources and supports than the teachers of students with mild disabilities.

### ***Collaborative Teaching***

Studies also have examined the experiences of GE and SE teachers who have implemented inclusion by working as collaborative teaching teams. Minke, Bear, Deemer, and Griffin (1996) reported survey results of 318 teachers of students with mild disabilities (185 GE teachers in traditional class-

rooms, 64 SE teachers in inclusive settings, 69 GE teachers in inclusive settings). They found that general and special educators working collaboratively in inclusive settings had higher levels of personal efficacy and higher self-ratings of competence and satisfaction in teaching students with disabilities than general educators who taught in traditional classroom arrangements.

Phillips, Sapona, and Lubic (1995) interviewed six general educators and four special educators regarding their experiences in working as a collaborative team to teach students with mild and severe disabilities in elementary-level GE settings. The teachers' responses indicated that, although they initially experienced some anxiety, most of the collaborative teams evolved into a unit that was characterized by engaging in shared planning and curriculum development, learning from each other, developing trust and solving problems together, and enjoying their teaching partnerships. However, two of the collaborative teams were not successful because of their inability to communicate with each other, to resolve teaching style differences, and to integrate the SE teacher and the students with disabilities into the classroom.

The respondents also identified the impact of their collaborative efforts for teachers. Benefits for teachers included the opportunity to teach students with a full range of learning abilities, to feel less isolated, and to observe positive changes in students with and without disabilities. Concerns identified by SE teachers included performing a subordinate role in the GE classroom and worrying that inclusion would result in the loss of specialized services and instruction to students with special needs.

Walther-Thomas (1997) used classroom observations, semistructured interviews, relevant school documents, and informal contacts to study the experiences of 18 elementary and 7 middle school co-teaching teams. Because of personnel changes over the 3-year duration of the study, the 25 teams consisted of 119 teachers and 24 administrators who worked in inclusive classrooms that served students with mild and severe disabilities. The respondents reported several social and academic benefits for their students with and without disabilities, but the participants also identified the benefits to and problems experienced by educators working in co-teaching teams. Benefits for general and special educators included greater professional satisfaction as well as increased opportunities to share their expertise with others, to explore and expand their professional capabilities, to receive personal and professional support from others, and to collaborate on a building- and district-wide basis. The problems noted by respondents related to scheduling planning time for teachers, coordinating the schedules of students and teachers, maintaining appropriate caseloads, obtaining administrative support, and receiving staff development.

Salend et al. (1997) investigated the perceptions and experiences of a cooperative teaching team (a GE and an SE teacher) by analyzing the dyad's journal entries. Comments in their journal indicated that both team members initially approached their co-teaching experience with concerns regard-

ing teaching space, role delineations, teaching styles, and philosophical differences. However, subsequent journal entries indicated that collaborative teaching served to make teaching more enjoyable and stimulating, to encourage the teachers to experiment with new teaching methodologies, and to prevent the isolation that some teachers encounter when they work alone.

### Summary

In summary, the studies reviewed reveal that educators have varying attitudes toward and mixed reactions to inclusion. Teachers' responses to inclusion programs are shaped by a variety of variables and change over time. Teachers' perceptions of inclusion seem to be related to their success in implementing inclusion, to student characteristics, and to the availability of financial resources, instructional and ancillary supportive services, training, administrative support, and time to collaborate and communicate with others.

Research has identified several positive and negative outcomes of inclusion for teachers. Positive outcomes for GE teachers included increasing skill at meeting the needs of their students with and without disabilities, being more aware of the impact of teachers as positive role models for all students, developing an increased confidence in their teaching ability, and feeling good about their ability to change. Concerns identified by general educators included the negative attitudes of others, the fear that the education of students without disabilities might suffer, the inability of GE staff to address the severe health and medical needs and behavioral challenges of students with disabilities, the lack of funds to support personnel and instructional needs, the rigid requirements associated with the GE curriculum, the limited amount of time for collaboration and communication among staff members, and the limited availability of financial resources.

For special educators, the benefits included an increased feeling of being an important part of the school community, an enhanced perspective on education and knowledge of the GE system, and a greater enjoyment of teaching related to working with students without disabilities and observing the successful functioning of their students with disabilities in inclusive settings. The concerns of special educators related to their perceived loss of control over the classroom environment, their subordinate role in the GE classroom, and their fears that inclusion would result in the loss of specialized services to students with disabilities.

General and special educators participating in cooperative teaching arrangements noted that their involvement in these programs enriched their professional and personal lives. Although cooperative teaching teams initially experienced some anxiety, teachers reported that these instructional arrangements helped make teaching more enjoyable and stimulating, encouraged the teachers to experiment with new teaching methodologies, and prevented the isolation that some teachers encounter when they work alone. Problems encountered by cooperating teaching teams related to communicating with

each other, resolving teaching style differences, coordinating the responsibilities of both teachers, scheduling planning time, coordinating the schedules of students and teachers, maintaining appropriate caseloads, obtaining administrative support, and receiving staff development.

### DISCUSSION

The findings of the studies cited in this review indicate that the impact of inclusion programs on the academic and social performance of students with disabilities is varied. Whereas some studies suggest that inclusion more often results in positive academic and social outcomes for students with disabilities, other studies indicate that some students with disabilities benefit academically when they receive their educational programs through traditional SE service delivery models. Although several factors may contribute to this inconclusive finding, important variables seem to be the quality of the inclusion program and the extent to which the GE system accommodates the academic and social needs of students with disabilities in inclusion programs (Waldron & McLeskey, 1998). For example, Fox and Ysseldyke (1997) examined an inclusion program that was not successfully implemented and found that, because of inadequate training and a lack of administrative leadership, GE teachers did not make significant modifications in their teaching strategies to address the needs of students with disabilities. Similarly, Salend, Brooks, and Salend (1987) surveyed educators responsible for coordinating their school districts' mainstreaming efforts and found that few of the districts employed systematic and viable procedures that were based on the quality indicators associated with successful inclusion programs.

The research suggests that students without disabilities can benefit from placement in inclusion programs. The principal benefits include an increased acceptance, understanding, and tolerance of individual differences and the development of meaningful friendships with classmates with disabilities. However, MacMillan, Gresham, and Forness (1996) suggested that contact with students with disabilities in itself does not result in favorable attitudes toward and improved acceptance of individuals with disabilities. They reported that the nature and quality of the interactions affected attitudes toward students with disabilities. Furthermore, they noted that when students with disabilities engaged in objectionable actions in interactions with their GE peers, these behaviors could result in less favorable attitudes toward individuals with disabilities. Therefore, to implement inclusion programs that have positive outcomes for students with and without disabilities, educators need to assist students with disabilities in developing the appropriate social and behavioral skills that allow them to be integrated into the social and academic fabric of the class (Salend, 1998). Educators also can use a variety of strategies to make learning about individual differences and facilitating friendships among students integral parts of their curriculum (Salisbury, Gallucci, Palombaro, &



Peck, 1995) and to teach students with and without disabilities how to initiate, respond to, and maintain positive, equal-status social interactions with their peers (Elksnin & Elksnin, 1995; Hunt et al., 1996).

General and special educators seemed to have mixed reactions to inclusion. Their varied responses seem to be related to their efficacy in implementing inclusion, which in turn is associated with the administrative support, resources, and training they have received to implement effective inclusion programs. Therefore, school districts and administrators can engage in several activities that demonstrate their commitment to and support of inclusive education. School districts can begin to promote the success of inclusion programs by including all school and community groups in developing a mission statement that articulates the district's vision with respect to educating students with disabilities in GE classrooms and a strategic plan for providing instructional and physical resources, time to collaborate and communicate, training, and support to achieve its mission statement (Idol, 1997; Janney, Snell, Beers, & Raynes, 1995). For example, administrators can institute flexible scheduling that provides teachers with sufficient time to collaborate and to coordinate the delivery of the services they provide to students (Idol, 1997; Walther-Thomas, 1997). Administrators, in conjunction with institutions of higher education, also can offer ongoing preservice and inservice personnel training to provide teachers with the skills to teach students in inclusive settings and work together as a cooperative teaching team (Downing et al., 1997; Scruggs & Mastropieri, 1996).

The conclusions of this article should be interpreted with several cautions that are related to the limitations associated with the research studies reviewed. First, whereas some of the studies cited employed small-sample quantitative research designs, the majority of the studies reviewed employed qualitative research methodologies, had small sample sizes, lacked random selection of participants, and focused for the most part on the impact of inclusive practices for students with LD and students with moderate and severe disabilities educated in elementary classrooms. These limitations make it difficult to generalize the findings to the larger population of students with disabilities, especially to students with disabilities educated in secondary-level settings. Second, the research on inclusion is limited by problems related to comparative field investigations in education such as identifying and describing the treatment conditions associated with control and experimental groups; insuring equivalent resources, students, and teachers; and defining the components of inclusion programs (Manset & Semmel, 1997). Third, the responses of participants to surveys and interviews may be affected by the respondents' desire to give socially acceptable responses that may not accurately reflect their actual attitudes toward and experiences with inclusion.

Future research is needed to address some of these limitations and to expand our knowledge of inclusive practices. Given the unique needs of students with emotional disturbances and students with physical and sensory disabilities,

research needs to examine the impact of inclusion on these students. Similarly, because the implementation of inclusion at the secondary level may be quite different from that at the preschool and elementary levels (Thousand, Rosenberg, Bishop, & Villa, 1997; U.S. Department of Education, 1996), there is a need for studies that investigate inclusive practices in secondary-level settings. Future studies also should employ methodologically sound qualitative and quantitative research procedures to empirically examine the effects of inclusion programs and include multiple measures and strategies for assessing a broad spectrum of educational and social outcomes for students and educators involved in inclusive education.

The inclusion movement has the potential to have a positive impact on students with and without disabilities and their teachers. However, these positive outcomes are not being realized for some students placed in inclusive settings, which can result in a concomitant negative reaction to inclusion on the part of their teachers. Researchers and school districts need to work together to validate and disseminate information about effective inclusion practices, policies, and programs that address the needs of students and teachers. ■

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Running Head: Impact of students with disabilities

The impact of students with disabilities included in third grade classrooms on the large-scale  
achievement scores of their non-exceptional peers

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Running Head: Impact of students with disabilities

The impact of students with disabilities included in third grade classrooms on the large-scale achievement scores of their non-identified peers

**Abstract**

Few large-scale empirical studies have examined the impact of the presence of students with disabilities in inclusive classrooms on the academic performance of students without disabilities. This study investigates whether the number of students in third grade classrooms formally identified as exceptional, and those not formally identified but receiving special education support through I.E.P.s, class size and socio-economic status (SES) are related to the reading, writing and mathematics achievement scores of students without disabilities on the Ontario large-scale assessment results for 1997-98. The results of regression analysis indicate that achievement scores of students without disabilities in single-grade inclusive classrooms are not adversely affected, and may even be enhanced, by the inclusion of students with disabilities regardless of the number included in the class. As expected from previous studies, SES did predict performance, while class size did not.

A persistent issue in the debate about the inclusion of students with disabilities in general education classrooms concerns whether the presence of students with disabilities has a negative effect on the academic growth of students, both with and without disabilities, and on the resources and instructional quality available to students without disabilities (Galis & Tanner, 1995; Peck, Carlson, & Helmsetter, 1992; Peltier, 1997; York, 1995). Despite claims that this is the case, studies by Dyson and Polat (2004), Fishbaugh and Gum (1994), Hunt, Staub, Alwell and Goetz (1994), Sharp, York and Knight (1994) and Saint-Laurent et al. (1998) found that the inclusion of students with disabilities in the general education classroom is not detrimental to the academic performance of students without disabilities. Indeed, Dyson and Polat (2004) showed that schools with staff that valued both high inclusion and high achievement produce students with above average achievement scores, whether or not they had a disability.

In addition to school values, factors that have been proposed as influencing the achievement scores of students are teachers' attitudes and socio-economic status (SES) (McLoyd, 1998), and class size. Jordan and Stanovich (2001) examined the relationship between school values for and teachers' beliefs about inclusion on teaching practices. They showed that in schools where teachers viewed their roles and responsibility to be to work with included students with disabilities the quality of instruction was higher. Such teachers were more likely to produce effective instructional strategies and with greater frequency that engaged all their students compared to teachers without these beliefs.

Cawley, Parmar, Foley, Salmon, and Roy (2001) studied the effect of socio-economic status (SES) on the arithmetic performance of students with and without disabilities enrolled in school districts with high and low socio-economic characteristics in three different U.S.

geographical locations. They concluded that "the element of socioeconomic status may have a more positive or negative effect than disability status does" (p. 327). Fujiura and Yamaki (2000) stated that a "covariation of poverty and disability is well established" (p. 187). Rossi, Herting, and Wolman (1997) reported that a large percentage of teacher-identified students with disabilities came from lower socio-economic quartiles when compared to students without disabilities on the National Education Longitudinal Study of 1998 (NELS:88). Therefore, SES appears to be influential in determining who is exceptional. Although definition and measurement of SES remains controversial, it is agreed that parental occupation, parental education, and family income are important components of SES (McLoyd, 1998). The impact that socio-economic status has on student achievement may also depend on such factors as school size and school location or length of time in poverty (Abbott, Joireman, & Stroh, 2002; Caldas & Bankston, 1997; Johnson, Howley, & Howley, 2002; McLoyd, 1998).

Class size has also been used to explain differences in student achievement. Although well-designed class size studies seem to have influenced policymakers into reducing class size (Achilles, Finn, & Bain, 1998; Finn & Achilles, 1999), their validity and generalizability have been questioned (Goldstein, 2000; Hanushek, 1998). Results of studies on the effect of class size on achievement continue to present a mixed picture, with some studies indicating advantages of small class sizes, especially for students who have traditionally been educationally disadvantaged, while others conclude that reduction in class size will not necessarily result in higher achievement (Biddle & Berliner, 2002; Hall, 2002).

Thus the research base on the factors that influence academic outcomes of students is complex, and to date the evidence has been mixed (Staub & Peck, 1994)(~~Staub & Peck, 1994~~). Of those empirical studies that investigated whether academic progress of students without

disabilities will suffer due to the inclusion of students with disabilities, none has provided strong evidence of a negative impact. However, the results of most studies cannot be generalized as researchers cited various limitations to their research, including size of and variation in the sample, suitability of instruments, and site selection (Hollowood, Salisbury, Rainforth, & Palombaro, 1994; Odom, Deklyen, & Jenkins, 1984; Salend & Duhaney, 1999). Also, few large-scale assessments of student outcomes including students both with and without disabilities have been conducted (Lipsky & Gartner, 1997).

The purpose of this study was to examine the effect of the number of students with disabilities per class, class size, and socio-economic status on the large-scale achievement scores of students without disabilities in single-grade (i.e. not split grade) third grade inclusive classes. Students with disabilities is the term to be used here to indicate two groups of students; those who had been formally identified as exceptional through Ontario's procedures, and those who were receiving instruction through an Individual Education Program (an I.E.P.) in order to receive special education support. The Ontario legislation differs somewhat from the federal U.S. legislation in permitting these alternatives ways to deliver services to students with high-incidence disabilities. The first group consist of students with a documented disability who are formally identified by an Identification, Placement and Review Committee (I.P.R.C.) as exceptional, as belonging in one of 13 categories of exceptionality prescribed in the legislation, and as eligible for placement with special education support. The parents of such students have the right to due process hearings and appeals regarding the designation and category of exceptionality and the proposed placement. Ontario legislation states that the regular classroom is the placement of choice for such students and should be considered first when placement is



decided. Students who are formally identified may also be eligible for specialized per-pupil funding to receive additional resources and support for at least a part of the school day.

The second group of students with disabilities is defined in Ontario through a legislated process that includes parent consultation with general and special education personnel in a school-based process of identification and individual program development, but the students do not receive a formal designation as exceptional and are not identified as being a member of a category of disability. These students receive instruction with the support of an I.E.P. which specifies accommodations and may specify curriculum modifications. The I.E.P. may prescribe instruction that includes programs and services delivered by special education personnel in the general education classroom or on a pull-out basis outside the classroom. It should be noted that the 163 school systems in Ontario are at liberty to determine the form of delivery of educational programs and services, and therefore they differ in the extent to which they subscribe to categorical identification by routing students with disabilities through the I.P.R.C. formal procedures. In some school systems very few students are formally designated as exceptional, yet many receive special education support through an I.E.P., while in other school systems formal designation by an I.P.R.C is prerequisite to prescribing an I.E.P.. In this study, although we were able to identify which students were being served in each group, we could not determine how school systems allocated students to each group and in what proportions. We therefore combined these groups and use the term 'students with disabilities' to encompass both groups. Students with disabilities were therefore all those students taking the grade 3 assessment in the spring of 1998 whom the teachers had designated as exceptional and who qualified for special education support. According to the Education Quality and Accountability Office (EQAO)'s guidelines, "a student who has been identified through an Identification, Placement



and Review Committee (IPRC) process – or even one who has not been formally identified but who has special needs – may be considered for accommodations” (Education Quality and Accountability Office, 1997a)(EQAO, 1997a). Allowable accommodations included additional time and assistance in recording responses. When returning the completed assessment materials, teachers reported which students received accommodations. Of all the students participating in the Grade 3 Assessment of Reading, Writing, and Mathematics in 1997-1998 or exempted for whom this information was available, about 9% were formally identified as exceptional (not including gifted) and 12% were not formally identified but were designated by their teachers as having special needs which resulted in accommodations during the assessment.

The purpose of this study was to examine the effects of (1) the number of students with disabilities per class, (2) class size, and (3) socio-economic status on the achievement of students without disabilities in single-grade inclusive classes. Specifically, we addressed the question: What is the relationship between the variables (number of students with disabilities per class, class size, and socio-economic status of the school catchment area) and the reading, writing, and mathematics achievement scores of students without disabilities in single grade third grade classes?

## Method

### *Measurement of Student Achievement*

Ontario's Ministry of Education requires testing of elementary students in grades 3 and 6 in reading, writing, and mathematics. These assessments are developed by a provincial agency, the Educational Quality and Accountability Office (EQAO), which is funded by the Ministry of Education. The Grade 3 Assessment of Reading, Writing, and Mathematics contains both

multiple-choice and constructed-response items based on the Ontario curriculum that are developed by Ontario teachers and EQAO staff. For the 1997-1998 academic year, the Grade 3 Assessment was administered over a five-day period with three hours of testing each day. The completed assessments were returned to EQAO, where they were marked by Ontario teachers trained by EQAO, using rubrics that were developed based on the Ontario curriculum documents. Results were reported on a four-point scale, with 4 indicating the highest level of achievement, and 3 representing the provincial standard. A score of 2 indicated below standard and a 1 indicated far below standard. High inter-rater reliability is monitored and maintained during the annual provincial marking process.

#### *Participants*

*Exempted students.* All Ontario students registered in the third grade were required to take part in the Grade 3 Assessment of Reading, Writing, and Mathematics, unless granted an exemption. Exemptions could be offered "if the full range of permitted accommodations has been considered and it is determined that the student still would not be able to provide evidence of learning under these conditions" (Education Quality and Accountability Office, 1997a)(EQAO, 1997a). Those students who were exempted did not participate in the assessment and this was reported by the teacher on the class lists returned to EQAO with the completed assessment materials.

*Students with disabilities.* I The number of students with disabilities per class was the number of students who met the definition of "students with disabilities" as described above, and were not receiving ESL services, not in programs for the gifted, or were not in French immersion classes. This count for each class is used in the analyses. Students without disabilities were all those who did not meet the definition for students with disabilities, were not identified as gifted,

were not receiving ESL services, and were not in French immersion classes. The achievement results on the Grade 3 Assessment were averaged across these students in each class to obtain the average achievement level in reading, writing, and mathematics for students without disabilities. These class averages for reading, writing, and mathematics are used in the analyses.

*Single-grade classrooms.* In 1997-1998, teachers reported that 128,160 students in 6,838 classes took part in or were exempted from the Grade 3 Assessment of Reading, Writing, and Mathematics. About half (51.6%) of those classes were split grade 2/3 or grade 3/4. Data were not available about the students in those classes who were not in third grade, making it impossible to determine either the number of students with disabilities or the class size for those classes. Therefore split grade classes were not included in this study, leaving about 3,300 single grade classes. Almost a third of these classes could not be included because of missing or contradictory data, leaving 2,294 single-grade classes with adequate data. The representativeness of the remaining classes were examined by Demeris (2004) and judged to be acceptable.

*Class size.* Each teacher returned the student assessments by his or her class and a list of students who were exempted. The class size was the number of assessments completed plus the number of students exempted. Class size for single-grade classes ranged from six to 37 students and was distributed as follows: 1 to 15 students (18 classes), 16 to 20 students (107 classes), 21 to 25 students (803 classes), 26 to 30 students (1,098 classes), and 31 or more students (239 classes). The instability of class mean scores was analyzed using confidence limits. Due to the large variability around the class mean scores for classes of 1-15 students for reading, writing, and mathematics, these classes were dropped from the sample set, leaving 2,276 single-grade classes with 16 or more students.

*Schools with multiple third grade classes.* Some schools had more than one third grade class, making it important to first analyze whether students with disabilities were distributed evenly across classes. Burns and Mason (2002) concluded that principals manage the learning outcomes of classes through purposeful assignment and manipulation of class distributions. Assignment of more independent students and high-ability students increases "the teachers' chance of successfully maintaining task involvement and using time productively ...to move through the curriculum at a brisker pace" (Burns & Mason, 2002, p. 226). Students may also be assigned because of the skill and experience of the teacher.

To determine if there was any purposeful assignment of students with disabilities to different classrooms in the same school, a chi-square was calculated for each school. There were 271 schools with two third grade single-grade (i.e., not split grades) classes. Twenty-one schools had critical values above 3.841,  $p < .05$ . A good fit of the theoretical distribution to the observed values was found using a quantile-by-quantile (Q-Q) plot, confirming the above finding that there were twenty-one schools with chi-square above the critical value. An overall chi-square was obtained by summing the chi-square value for each school. The results indicated that there was no evidence to conclude that there was purposeful assignment in the 271 schools. These classes were therefore kept in the dataset.

Similarly, a chi-square value was calculated for each class in schools with three third grade single-grade classes. There were 73 schools in this sample dataset, of which four schools had critical values above 5.99,  $p < .05$ . Again, the observed values were plotted against the expected values in a Q-Q plot. Deviation from the line was observed. The chi-square values of each school were summed, and found to be significant ( $\chi^2(73, 73) = 123.089, p < .05$ ), indicating that there may have been purposeful assignment in schools when there were three

third grade classes. Schools with two and three third grade classes indicated no significant differences in the proportion of students with disabilities to total class size. The sample sizes of schools with more than three third grade classes were too small to analyze. These classes were kept in the data set.

*Inclusive classrooms.* Because the purpose of this study is to examine the impact of students with disabilities on the achievement of students without disabilities, it is important to consider the ratio of students with disabilities to students without disabilities. Rodriguez and Romaneck (2002) noted that in "a best-practices classroom, the percentage of students with disabilities should mirror the natural proportions of the school" (p. 4). The authors suggested that if the ratio exceeds one special education student to three typically achieving students, the classroom might be characterized as a special education classroom. A literature review did not reveal a definitive ratio of students with disabilities (especially when students with disabilities is defined as in this study) to total class size; therefore, for this study a ratio of .333 students with disabilities to total class size was used. There were 29 classes that exceeded the 0.333 ratio, with ratios ranging from 0.345 to 0.571. These classes were dropped from the analyses, leaving 2,247 single-grade classes with 16 or more students and a ratio of students with disabilities to students without disabilities of less than .333. The analyses were performed on these 2,247 classes. The distribution of students with disabilities in these classes is provided in Table 1.

#### *Socio-Economic Status*

The data for the socio-economic status of the school were obtained from the Statistics Canada (1996) Census and were an aggregate of the average family income of families living within the postal code of the school.

#### *Analyses*

The two main research questions were addressed using multiple regression analyses performed at the level of the class. Because the variable 'socio-economic status of the class' was positively skewed, it was transformed using a natural logarithm (Ln). The dataset was reviewed for outliers using studentized residuals, Cook's Distance statistics, leverage values, DFFITS, and DFBETAS. This resulted in the removal of eight classes from the reading dataset, ten classes from the writing dataset, and also ten classes from the mathematics dataset.

Analyses were performed for each achievement variable (reading, writing, and mathematics class averages) separately. Regression models with each possible linear combination of the predictor variables (number of students with disabilities, class size, and socio-economic status of the class) were tested, for a total of seven regression models for each criterion variable. The results of these analyses are presented in Tables 3, 5, and 7, where the presence of a regression coefficient in a column indicates the presence of that predictor variable in the model.

Correlations were computed for each of the three achievement variables and predictor variables. Using the Bonferroni method to control for Type 1 error, the significance level for each individual test was set at  $0.05/3 = 0.017$ .

The regression models selected for each of the three achievement variables were compared using bivariate correlations and Hotelling's *t*-test (Guilford & Fruchter, 1973) and Meng, Rosenthal and Rubin's (1992) *z*-test to determine if the regression model of one subject can predict the other subject. Hotelling's *t*-test is the standard for comparing correlated correlation coefficients from a single sample (Meng et al., 1992). However, Hotelling's *t*-test has limitations (Meng et al., 1992; Onwuegbuzie & Daniel, 2003), because it uses actual correlation values, even though *r*-values are not normally distributed. The Meng et al. *z*-test uses Fisher's *z*



transformation to convert the correlation coefficients to a normal distribution and uses  $z$ s in the significance testing formula. Correction for Type 1 error was made using an alpha value of .017 as three t-tests were done.

## Results

### *Reading Achievement Scores*

Correlations were computed for class mean reading scores and predictor variables of the full model and are provided in Table 2.

There was a significant positive correlation between income and class mean reading achievement scores. Also, the number of students with disabilities and class size were correlated with each other. Income was positively correlated with class size and negatively correlated with the number of students with disabilities per class.

Table 3 shows the standardized regression (beta) weights and the proportion of variance accounted for ( $R^2$ ) of the seven regression models. Results of the regression analyses indicated significant relationships between:

- class mean reading scores and Ln of socio-economic status,  $F(1,2001) = 150.920, p < .05$  (Model 3);
- class mean reading scores, class size, and Ln of socio-economic status,  $F(2,2000) = 82.825, p < .05$  (Model 5); and,
- class mean reading scores, class size, number of students with disabilities per class, and Ln of socio-economic status,  $F(3, 1999) = 57.409, p < .05$  (Model 7).

The predictive powers of Models 3, 5 and 7 were tested using the  $F$  statistic. There was a significant  $R^2$  change between Models 3 and 5,  $F(1, 1999) = 12.981, p < .05$ . Similarly, Models 5



and 7 were compared to see if the addition of the variable number of students with disabilities per class would improve the prediction of class mean reading scores. There was a significant change in  $R^2$  between Models 5 and Model 7,  $F(1, 1998)=6.508, p < .05$  with Model 7 providing the best fit. Thus Model 7 was used to fit the data.

In Model 7, about 7.9% of the variance of class mean reading scores in the sample was accounted for by the number of students with disabilities per class, class size, and Ln of socio-economic status. All three independent variables contributed significantly to the prediction.

When number of students with disabilities per class was added to class size and Ln of socio-economic status in Model 7, the  $R^2$  increased to .079. This was due to the suppression effect of number of students with disabilities per class. The beta weight of number of students with disabilities per class was .055 which was greater and opposite in sign to its correlation with class mean reading scores ( $r_{y_2} = -.009$ ). The beta weight for Ln of socio-economic status

( $\beta_3 = .289$ ) was also greater than its correlation with class mean reading scores ( $r_{y_3} = .265$ ).

Both results were due to controlling for the other predictor. Therefore, the relation of number of students with disabilities per class to class mean reading scores was actually positive once Ln of socio-economic status was controlled and the relation of Ln of socio-economic status to class mean reading scores was even stronger once the predictive effect of number of students with disabilities per class was held constant. Similarly, the beta weight ( $\beta = -.093$ ) of class size was substantially higher than its bivariate correlation ( $r_{y_1} = -.039$ ) and its regression coefficient was significant, indicating suppression was present.

#### *Writing Achievement Scores*

Table 4 provides the correlations for the class mean writing scores and predictor variables. Again, there was a significant correlation between income and class mean writing

achievement scores. The class size and number of students with disabilities per class were correlated with each other. Income was positively correlated with class size and negatively correlated with the number of special students per class. As in reading, regression analyses were run to examine the relationships between the class mean writing scores and predictors.

Beta weights and  $R^2$  values of these analyses are provided in Table 5. Results of the regression analyses indicated significant relationships between:

- class mean writing achievement scores and Ln of socio-economic status,  $F(1, 1995) = 181.569, p < .05$  (Model 3).
- class mean writing achievement scores, and class size and Ln of socio-economic status,  $F(2, 1994) = 97.345, p < .05$  (Model 5).
- class mean writing achievement scores, class size, number of students with disabilities per class, and Ln of socio-economic status,  $F(3, 1993) = 67.202, p < .05$  (Model 7).

There were significant  $R^2$  changes between Model 3 and 5,  $F(1, 1993) = 13.126, p < .05$ , and Model 5 and 7,  $F(1, 1992) = 6.581, p < .05$ , with Model 7 providing the best fit. Thus, Model 7 was used to fit the data.

In Model 7, about 9.2% of the variance of class mean writing achievement scores in the sample was accounted for by number of students with disabilities per class, class size and Ln of socio-economic status. All predictors contributed significantly.

As in reading, number of students with disabilities per class was a suppressor when added in Model 7. Its beta weight was greater and opposite in sign to its correlation with class mean writing achievement scores. The relation of number of students with disabilities per class to class mean writing achievement scores was positive once Ln of socio-economic status was controlled

and the relation of Ln of socio-economic status to class mean writing achievement scores was even stronger once the beneficial effects of number of students with disabilities per class were held constant. Also, class size was a suppressor as its beta weight was substantially higher than the value of the correlation coefficient with a significant regression coefficient.

#### *Mathematics Achievement Scores*

Table 6 provides the correlations for the class mean mathematics scores and predictor variables. Income and class size were correlated with class mean mathematics achievement scores. Although class size was negatively correlated with class mean mathematics scores, it was positively correlated with number of students with disabilities per class and income. Number of students with disabilities per class was correlated with the other predictors.

Regression analyses examined the relationships between the class mean mathematics scores and number of students with disabilities per class, class size and income. The results are provided in Table 7. Results of the regression analyses indicated significant relationships between:

- class mean mathematics achievement scores and class size,  $F(1, 1997) = 11.517, p < .05$ .
- class mean mathematics achievement scores and Ln of socio-economic status,  $F(1, 1997) = 78.462, p < .05$ .
- class mean mathematics achievement scores, class size and Ln of socio-economic status,  $F(2, 1996) = 52.021, p < .05$ .
- class mean mathematics achievement scores, number of students with disabilities per class and Ln of socio-economic status,  $F(2, 1996) = 41.547, p < .05$ .
- class mean mathematics achievement scores, class size, number of students with disabilities per class, and Ln of socio-economic status,  $F(3, 1995) = 38.605, p < .05$ .

Models 3 and 5 were compared and indicated a significant  $R^2$  change,  $F(1, 1995) = 25.200, p < .05$ . When Models 5 and 7 were compared, the  $R^2$  change between Models 5 and 7 was significant,  $F(1, 1994) = 10.550, p < .05$  with Model 7 providing the best fit. Thus, Model 7 was used to fit the data.

In Model 7, about 5.5% of the variance of class mean mathematics achievement scores in the sample was accounted for by number of students with disabilities per class, class size and Ln of socio-economic status. All predictors contributed significantly.

In mathematics, number of students with disabilities per class was the only suppressor variable. Although class size had a negligible correlation with class mean mathematics achievement scores, it had a stronger correlation with number of students with disabilities per class and Ln of socio-economic status and when added in Model 7 it increased the  $R^2$  value.

#### *Comparison of Regression Models*

The comparison of the regression models indicated that the regression model for one subject can predict another subject. Nevertheless, the amount of variance being explained for mathematics was smaller as opposed to reading and writing. Mathematics uses many types of representations which build on one another and become more abstract requiring more teacher assistance to grasp the concepts than does reading (National Research Council, 2001; U.S. Department of Education, 2001).

#### *Additional Analyses of Socio-economic Status*

Schools are being judged by their examination results on large-scale provincial assessments. Sammons (2001) noted that using the raw examination results to make judgements about school performance does not take into account the differences among the schools due to pupil ability, and the nature of the families and communities. Since previous research and the

results of this study indicate a strong relationship between income and student achievement, we compared the relative impact of socio-economic status between the lower and upper quartiles on the achievement outcomes. The lower quartile ranged from \$1 to 45,617 Canadian, and the upper quartile ranged from \$69,685 to 262,448 Canadian.

The results of the correlation and regression analyses showed that, in the lower quartile, there were no significant correlations among the three criterion variables and the predictor variables, yielding no significant regression models. In the upper quartile however, analyses indicated that different models fitted the data. For reading and mathematics, both class size and Ln of socio-economic status significantly contributed to the achievement, but class size was found to be inversely related to achievement. All three predictors, class size, number of students with disabilities per class per class, and Ln of socio-economic status, contributed to the regression model in the upper quartile for writing. The results indicated that students in the upper socio-economic quartile group have significantly higher class mean achievement scores in all three subjects and higher class sizes with medium effect sizes (Cohen, 1977). The  $R^2$  values of the upper quartile were lower than in the sample as a whole.

#### *Additional Analyses of Schools with a Single Third Grade Class*

As noted earlier, the assignment of students with disabilities may differ in schools with more than one third grade class compared to schools with only one third grade class. Therefore, further analyses were conducted in schools with only one third grade class to see if this subset differed from the main analyses.

The results differ from the main research results in that Ln of socio-economic status is the only significant predictor accounting for approximately 10.4% of the variance in class mean reading scores, 10.0% of the variance in class mean writing scores and 9.4% of the variance in

class mean mathematics scores. Unlike the dataset as a whole, in this subset the number of students with disabilities did not contribute to achievement scores.

### Discussion

The central question of this study was whether the inclusion of students with disabilities in inclusive third grade classrooms would impact the academic progress of students without disabilities. The results provide empirical evidence supporting previous findings that the performance of students without disabilities educated in single-grade, inclusive classrooms seems not to be compromised by the number of students with disabilities in the classroom, taking into consideration class size and the socio-economic status of the geographic area served by the school. The number of students with disabilities by itself did not have an impact on the achievement of students without disabilities, except in the upper socio-economic quartile of schools with a single third grade class. However, the results of the upper socio-economic quartile may be unstable because of small sample size.

The ideal class size has been the topic of extensive research. The results of this study indicate that class size, in combination with other factors, did contribute to predicting the achievement of students without disabilities. However, its impact is small when compared to the relative impact of socio-economic status.

Socio-economic status was found to be a strong predictor of achievement, but it lost its predictive strength when only the lower quartile of socio-economic status was examined.

In this study, regression analyses were conducted on each of the predictor variables and on combinations of the variables. The best fitting regression model in reading indicated that class size and the number of students with disabilities per class functioned primarily as suppressors of the variance due to socio-economic status that is irrelevant to class mean reading scores.



Removing this irrelevant variance increased the contribution made by socio-economic status. In effect, the predicted class mean reading scores increased as the number of students with disabilities increased once the effects of class size and socio-economic status were held constant. The class mean reading scores increased as the socio-economic status of the class increased holding the number of students with disabilities and class size constant. Similarly, the class mean reading scores increased as the class size decreased holding the number of students with disabilities and the socio-economic status of the class constant.

Similar results were obtained in the regression analyses of class mean writing scores, with class size and the number of students with disabilities functioning as suppressors of the variance in socio-economic status of the class that is irrelevant to writing scores. The writing scores increased as the number of students with disabilities and socio-economic status increased and class size decreased holding the other predictor variables constant.

On the other hand, class size was only slightly correlated with class mean mathematics scores, and had a low  $R^2$  value. Class size also correlated with number of students with disabilities and socio-economic status of the class. When entered into the regression equation with socio-economic status of the class, class size improved the  $R^2$  value both by directly predicting some of the variance in mathematics scores and indirectly measuring invalid variance due to socio-economic status of the class. The number of students with disabilities had a near zero correlation with class mean mathematics scores. When added to the model with class size and socio-economic status of the class, the standardized weight of number of students with disabilities was substantially higher than its bivariate correlation. As in reading and writing, when class size, an impure suppressor variable, and the number of students with disabilities was



added to model, suppression effects were removed from the equation, increasing the ability to predict class mean mathematics scores.

The effects of socio-economic status were examined in the lower and upper socio-economic quartiles. Socio-economic status of the class was found not to be a significant predictor of achievement in the lower socio-economic quartile group of classes, indicating there are other factors which impact on achievement. In the upper socio-economic quartile, socio-economic status was a significant predictor of achievement.

A comparison of the class mean scores in reading, writing and mathematics between the lower and upper socio-economic quartiles indicated a significant difference, signifying that students attending schools in the higher socio-economic group will achieve higher scores in all subjects.

The amount of variance explained by the regression model, including all the predictor variables on each subject area, was relatively small. This suggests that there are more important variables affecting academic achievement that have not been taken into account by this model. These may include family structure, neighborhood influences, and parent involvement in school related activities.

The dataset had a number of limitations which included many data entry problems. The 1997-1998 EQAO assessment was the second year of the provincial large-scale assessment and it was based on *The Ontario Curriculum, Grades 1 – 8* that was introduced in September of 1997. This was only the second year of conducting assessments which were based on this new curriculum, and therefore the teachers had less than one school year to develop classroom programs that incorporated the new curriculum before their students were assessed on the

curriculum-related large scale assessment (Education Quality and Accountability Office, 1998). Also, the third grade students participating in the assessment had not had the benefit of working towards the first and second grade expectations of the new curriculum.

The policies of the EQAO regarding accommodations and exemptions were similarly in their earliest stages of implementation. Therefore, teachers may have interpreted them with more latitude than was intended by the regulating body, the EQAO. The granting of accommodations might bring into question the validity of the inferences made from the test results. The greatest number of accommodations was offered in mathematics, while the greatest number of exemptions was in reading. It is assumed that the provision of an accommodation will significantly improve the score of students with disabilities with a minimal effect on students without disabilities.

Weber and Bennett (1999) noted that, in Ontario, an exceptional student is considered to be a full-time student for administrative purposes. All students in this data set were registered as members of their third grade classrooms. However, special education services may be provided in a range of settings, which may include total inclusion to part-time regular class with withdrawal for resource support. This information was not available for this study and is a limitation in the dataset. Therefore, the inferences which we make about the inclusion of students with disabilities in general education classrooms must be interpreted with caution since the extent to which these students were included for instructional purposes will have varied.

One of the outcomes of large-scale assessment is the ranking of schools in what is sometimes called "league tables" (Rouse & Agbenu, 1998). In Ontario, the media publish the rankings of schools based on the average third grade EQAO scores in each subject. These rankings directly impact teachers and schools, since they are under pressure by their school

system administrators to meet the provincially established standard for that subject area for that assessment year. Since 16% of third grade students were exempted from the 1997-98 assessment and are therefore represented in this study only in the class size variable, the outstanding questions are: 1) whether students may have been exempted to inflate the overall school mark; 2) whether there is a large number of students for whom the regular assessment is not appropriate. The proportions of exemptions offered in the lower and upper quartiles of the dataset were compared, revealing that a significantly higher proportion of students were exempted in the lower SES quartile of all three subject areas. However, this study did not investigate the effect of poverty on achievement in urban and rural settings issues that compound the debate about the influence of socio-economic status (Jerald & Curran, 1998; Johnson et al., 2002; Kohen, Herten, & Brooks-Gunn, 1999; Lippman, Burns, & McArthur, 1996). Further research is needed to determine if students are being exempted to inflate the overall school mark or whether alternate assessments should be considered for students for whom large scale assessment is not appropriate.

Overall, the evidence does not support the widely-held belief that the number of students with disabilities who are present in general education classrooms adversely affects the academic achievement of students without disabilities (Galis & Tanner, 1995; Peck, Carlson & Helmsetter, 1992; Peltier, 1997; York, 1995). Further, in sub-analyses of schools with only one third grade class, where there is no option for students to be differentially allocated across classes, no evidence of any negative impact on overall achievement due to number of students with disabilities could be found. This strengthens our conclusion that students with disabilities integrated into the third grade classrooms did not adversely affect student performance on the large-scale achievement test data presented here. This finding holds despite the fact that the

number of students with disabilities comprised up to one third of the total class size. Indeed, there is a remarkable possibility that increasing numbers of students with disabilities in a class may actually enhance the achievement scores of their peers. The number of student with disabilities seemed to act to suppress the negative effect on achievement scores created by low socio-economic status. This finding is intriguing and contrary to intuition.. Perhaps Dyson and Polat's (1994) observation that differences in school values, or Jordan and Stanovich's (2004) claim that instructional quality may contribute to such effects and might serve as starting points for further exploration.

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Table 1

*Number of Grade 3 Classes by Class Level Grouping in Single-grade Classes*

| <u>Class-level grouping</u>       | <u>Single-grade Classes</u> |
|-----------------------------------|-----------------------------|
| <u>16 – 20 students per class</u> | <u>107</u>                  |
| <u>21 – 25 students per class</u> | <u>803</u>                  |
| <u>26 – 30 students per class</u> | <u>1098</u>                 |
| <u>31 + students per class</u>    | <u>239</u>                  |

Table 1

*Number of Students with disabilities Distributed Across Classes*

| <u>Number of Students with disabilities</u> | <u>Number of Classes</u> |
|---------------------------------------------|--------------------------|
| 0                                           | 167                      |
| 1                                           | 201                      |
| 2                                           | 270                      |
| 3                                           | 322                      |
| 4                                           | 340                      |
| 5                                           | 331                      |
| 6                                           | 246                      |
| 7                                           | 194                      |
| 8                                           | 117                      |
| 9                                           | 48                       |
| 10                                          | 18                       |
| 11                                          | 4                        |
| 12                                          | 5                        |
| 13                                          | 1                        |

14

0

15

1



Table 2

*Correlations and Descriptives of Class Mean Reading Scores and Predictor Variables*

| Variables                                                            | Class Mean     |                 |                 |                 |
|----------------------------------------------------------------------|----------------|-----------------|-----------------|-----------------|
|                                                                      | Reading Scores | IV <sub>1</sub> | IV <sub>2</sub> | IV <sub>3</sub> |
| Class size (IV <sub>1</sub> )                                        | -.036          | -               |                 |                 |
| Number of students with disabilities per<br>class (IV <sub>2</sub> ) | -.009          | .197*           | -               |                 |
| Ln of socio-economic status (IV <sub>3</sub> )                       | .265*          | .161*           | -.160*          | -               |
| Mean                                                                 | 2.597          | 26.285          | 4.158           | 10.964          |
| Standard Deviation                                                   | 0.369          | 3.364           | 2.386           | 0.316           |

*Note.* Based on analyses of 2,003 classes. \*  $p < .017$

Table 3

*Standardized Beta Weights and R<sup>2</sup> Values of Regression Models for Reading*

| Model | Standardized Beta Weights |                                                |                             | <i>R</i> <sup>2</sup> |
|-------|---------------------------|------------------------------------------------|-----------------------------|-----------------------|
|       | Class Size                | Number of students with disabilities Per Class | Ln of Socio-economic Status |                       |
| 1     | -.036                     |                                                |                             | .001                  |
| 2     |                           | -.009                                          |                             | .000                  |
| 3     |                           |                                                | .265*                       | .070                  |
| 4     | -.036                     | -.002                                          |                             | .001                  |
| 5     | -.081*                    |                                                | .278*                       | .078                  |
| 6     |                           | .034                                           | .270*                       | .071                  |
| 7     | -.093*                    | .055*                                          | .289*                       | .079                  |

*Note.* Based on analyses of 2,003 classes. \*  $p < .05$

Table 4

*Correlations and Descriptives of Class Mean Writing Scores and Predictor Variables*

| Variables                                                         | Class Mean     |                 |                 |                 |
|-------------------------------------------------------------------|----------------|-----------------|-----------------|-----------------|
|                                                                   | Writing Scores | IV <sub>1</sub> | IV <sub>2</sub> | IV <sub>3</sub> |
| Class size (IV <sub>1</sub> )                                     | -.029          | -               |                 |                 |
| Number of students with disabilities per class (IV <sub>2</sub> ) | -.013          | .195*           | -               |                 |
| Ln of socio-economic status (IV <sub>3</sub> )                    | .289*          | .155*           | -.167*          | -               |
| Mean                                                              | 2.678          | 26.288          | 4.158           | 10.966          |
| Standard Deviation                                                | 0.271          | 3.348           | 2.388           | 0.318           |

*Note.* Based on analyses of 1,997 classes. \*  $p < .017$



Table 5

*Standardized Beta Weights and R<sup>2</sup> Values of Regression Models for Writing*

| Standardized Beta Weights |               |                                         |       |                                   |                       |
|---------------------------|---------------|-----------------------------------------|-------|-----------------------------------|-----------------------|
| Model                     | Class<br>Size | Number of students<br>with disabilities |       | Ln of<br>Socio-economic<br>Status | <i>R</i> <sup>2</sup> |
|                           |               | Per Class                               |       |                                   |                       |
| 1                         | -.029         |                                         |       |                                   | .001                  |
| 2                         |               |                                         | -.013 |                                   | .000                  |
| 3                         |               |                                         |       | .289*                             | .083                  |
| 4                         | -.027         |                                         | -.008 |                                   | .001                  |
| 5                         | -.075*        |                                         |       | .300*                             | .089                  |
| 6                         |               |                                         | .036  | .295*                             | .085                  |
| 7                         | -.088*        |                                         | .056* | .312*                             | .092                  |

*Note.* Based on analyses of 1,997 classes. \*  $p < .05$

Table 6

*Correlations and Descriptives of Class Mean Mathematics Scores and Predictor Variables*

| Variables                                                            | Class Mean         |                 |                 |                 |
|----------------------------------------------------------------------|--------------------|-----------------|-----------------|-----------------|
|                                                                      | Mathematics Scores | IV <sub>1</sub> | IV <sub>2</sub> | IV <sub>3</sub> |
| Class size (IV <sub>1</sub> )                                        | -.076*             | -               |                 |                 |
| Number of students with disabilities<br>per class (IV <sub>2</sub> ) | .015               | .195*           | -               |                 |
| Ln of socio-economic status (IV <sub>3</sub> )                       | .194*              | .161*           | -.160*          | -               |
| Mean                                                                 | 2.521              | 26.285          | 4.160           | 10.965          |
| Standard Deviation                                                   | 0.368              | 3.364           | 2.386           | 0.318           |

*Note.* Based on analyses of 1,999 classes. \*  $p < .017$

Table 7

*Standardized Beta Weights and R<sup>2</sup> Values of Regression Models for Mathematics*

| Model | Standardized Beta Weights |                                |                          | <i>R</i> <sup>2</sup> |
|-------|---------------------------|--------------------------------|--------------------------|-----------------------|
|       | Class Size                | Number of Students             | Ln of                    |                       |
|       |                           | with disabilities<br>Per Class | Socio-economic<br>Status |                       |
| 1     | -.076*                    |                                |                          | .006                  |
| 2     |                           | .015                           |                          | .000                  |
| 3     |                           |                                | .194*                    | .038                  |
| 4     | -.082*                    | .031                           |                          | .007                  |
| 5     | -.110*                    |                                | .212*                    | .050                  |
| 6     |                           | .047*                          | .202*                    | .040                  |
| 7     | -.127*                    | -.076*                         | .227*                    | .055                  |

*Note.* Based on analyses of 1,999 classes. \*  $p < .05$



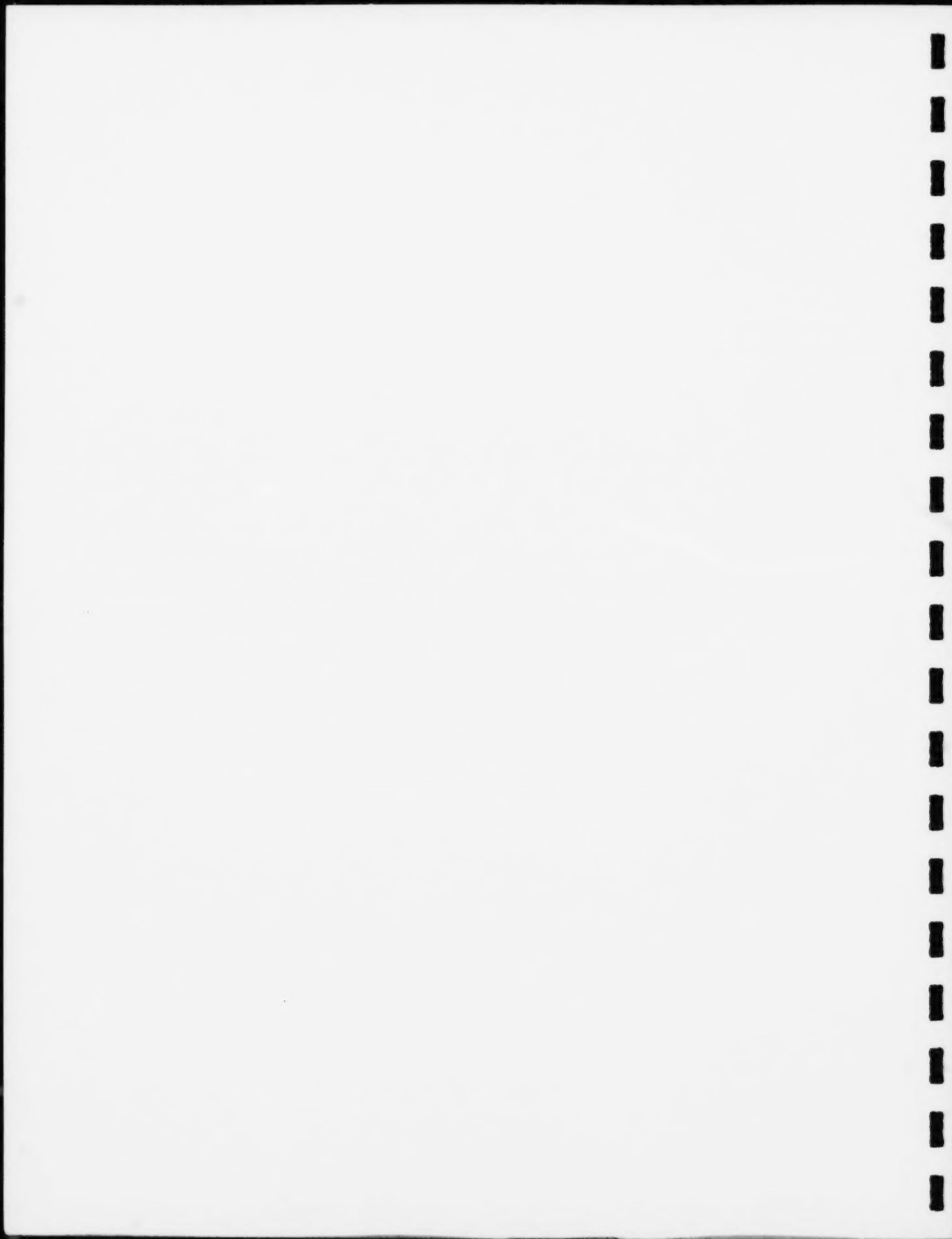
I am providing you with the results for the most recent administrations of the national assessment known as the School Indicators Achievement Program (SAIP)—Math 2001, Writing 2002, and Science 2004.

SAIP is not administered at a grade level but rather it is conducted with two age groups—13- and 16-year-olds. Both age groups write the exact same assessment. Because of the varying range of grade levels that these age groups are found in from one jurisdiction to another, it is more accurate to make comparisons where students have had the fullest opportunity to learn. Therefore, I have included the comparative results for 16-year-olds only. The results for 13-year-olds can be found in SAIP public documents and should be used cautiously when making comparisons.

When I spoke to you about our standing in relation to others, the science results had not been published. As well, discussions about our achievement in mathematics on our provincial assessment was an ongoing matter. Thus the comment that we ranked 7<sup>th</sup> was based on our SAIP mathematics results. Our result in SAIP writing is ranked lower, and the most recent results in SAIP science puts Nova Scotia in 6<sup>th</sup> place nationally.

It must also be pointed out that internationally, Nova Scotia achievement is ranked higher than a majority of OECD countries.

| SCHOOL ACHIEVEMENT INDICATORS PROGRAM (SAIP) RESULTS |                      |            |             |
|------------------------------------------------------|----------------------|------------|-------------|
| Math Content                                         | Math Problem Solving | Science    | Writing     |
| NS (E) 7th                                           | NS (E) 8th           | NS (E) 6th | NS (E) 9th  |
| NS (F) 2nd                                           | NS (F) 2nd           | NS (F) 9th | NS (F) 13th |



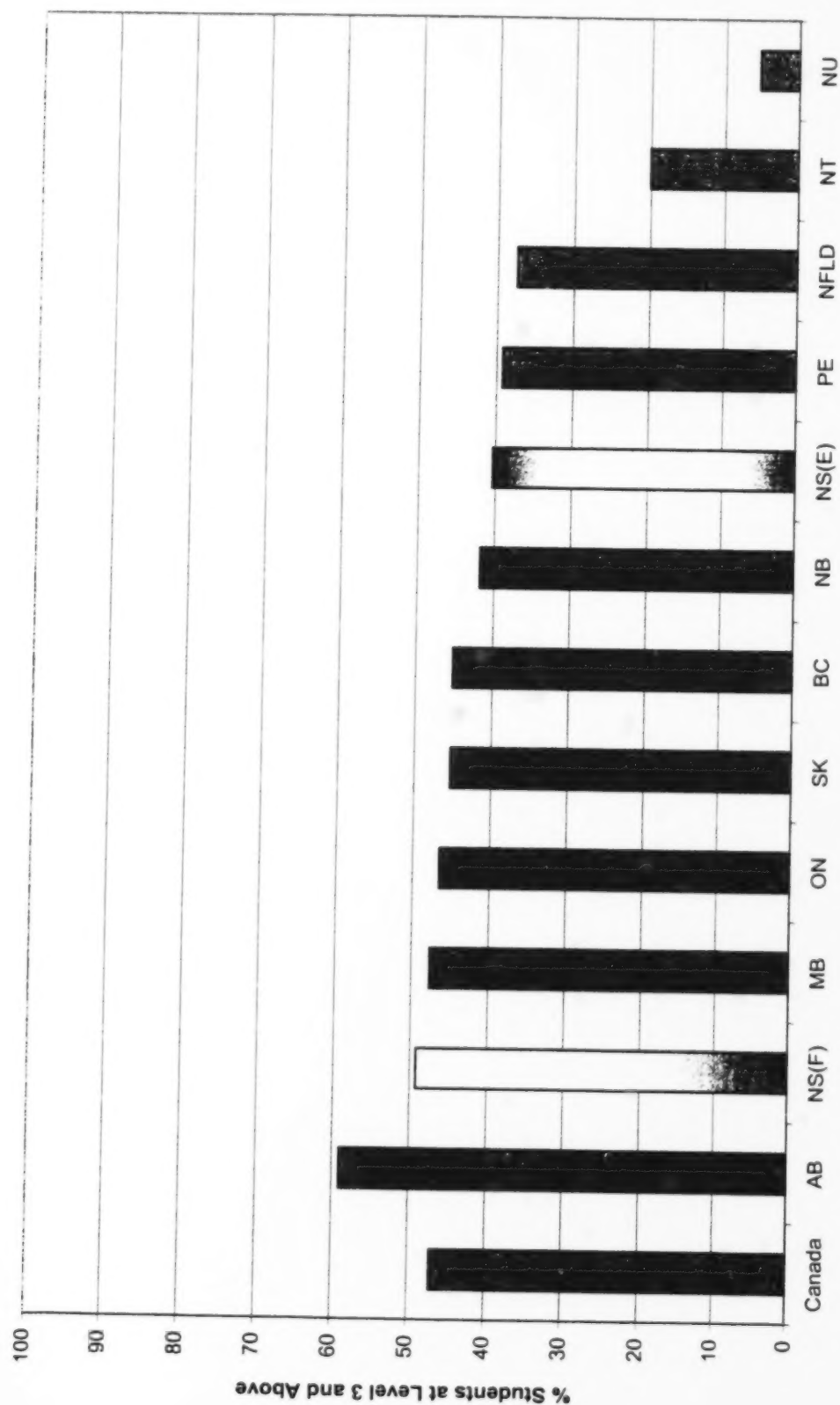
# SAIP Math Results for 16-Year-Olds - Math Content

Nova Scotia (F) ranked 2nd out of 12, Nova Scotia (E) ranked 7th out of 12



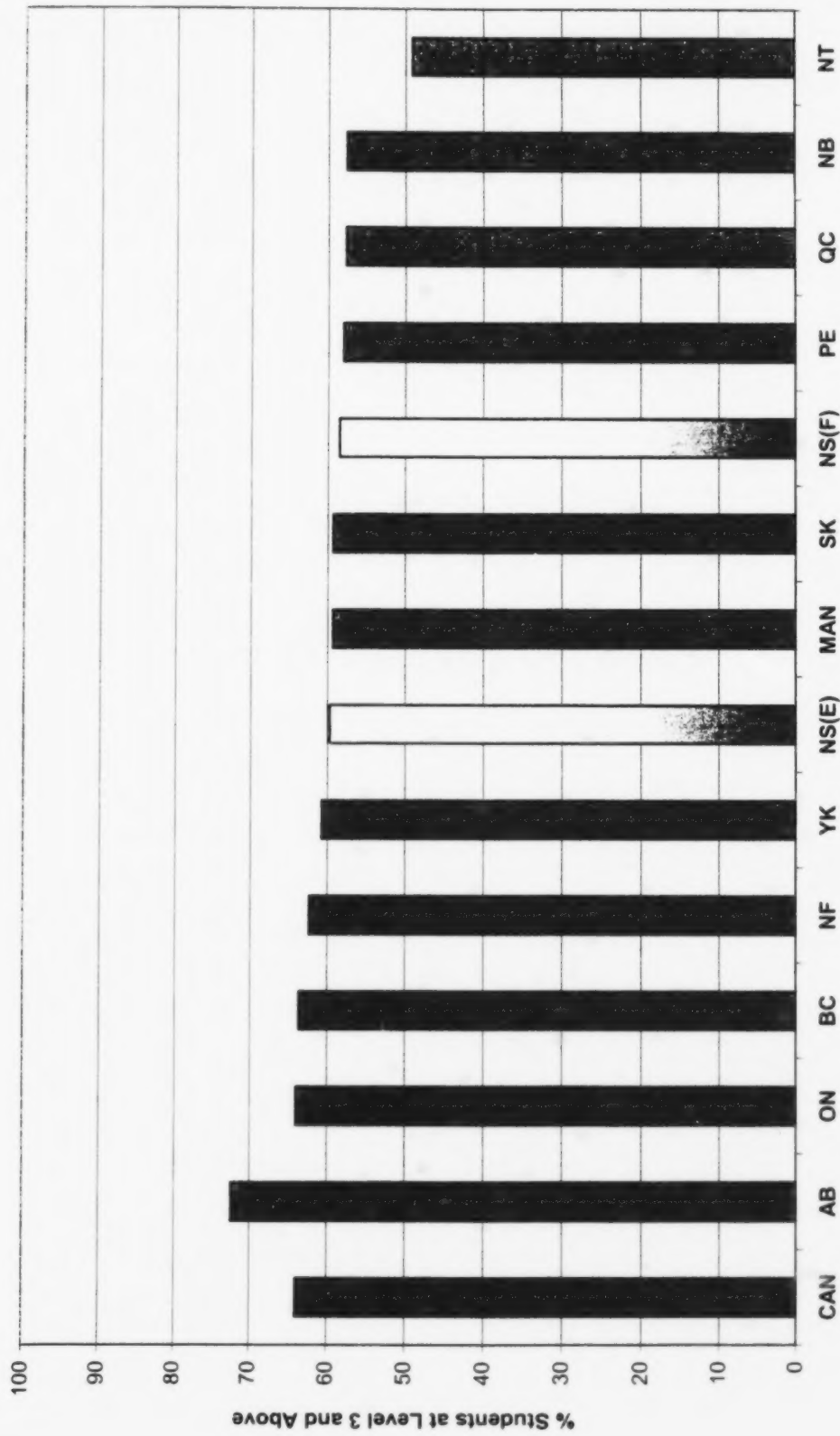


SAIP Math Results for 16-Year-Olds - Problem Solving  
 Nova Scotia (F) ranked 2nd out of 12, Nova Scotia (E) ranked 8th out of 12

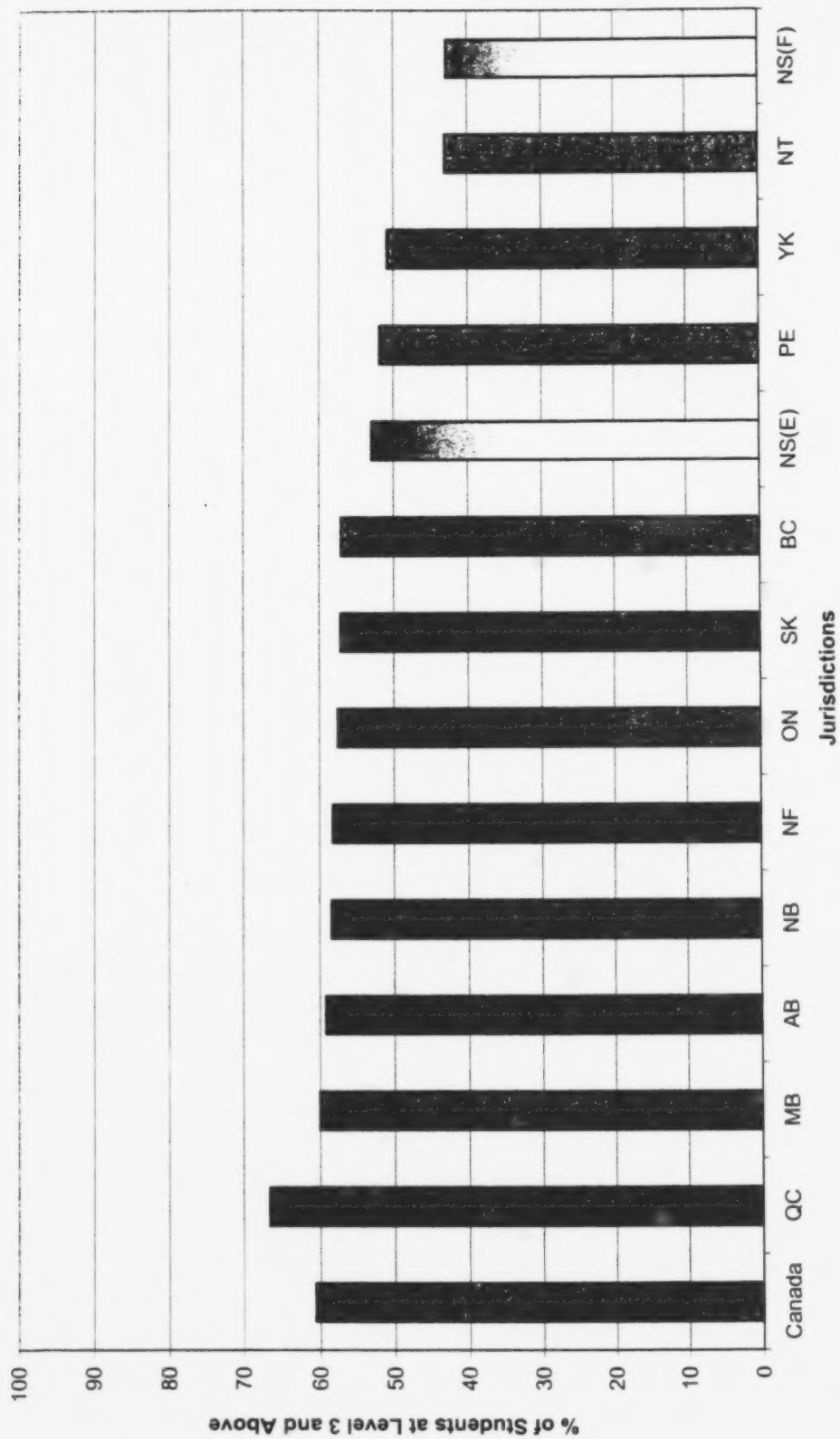


# SAIP Science Results for 16-Year-Olds

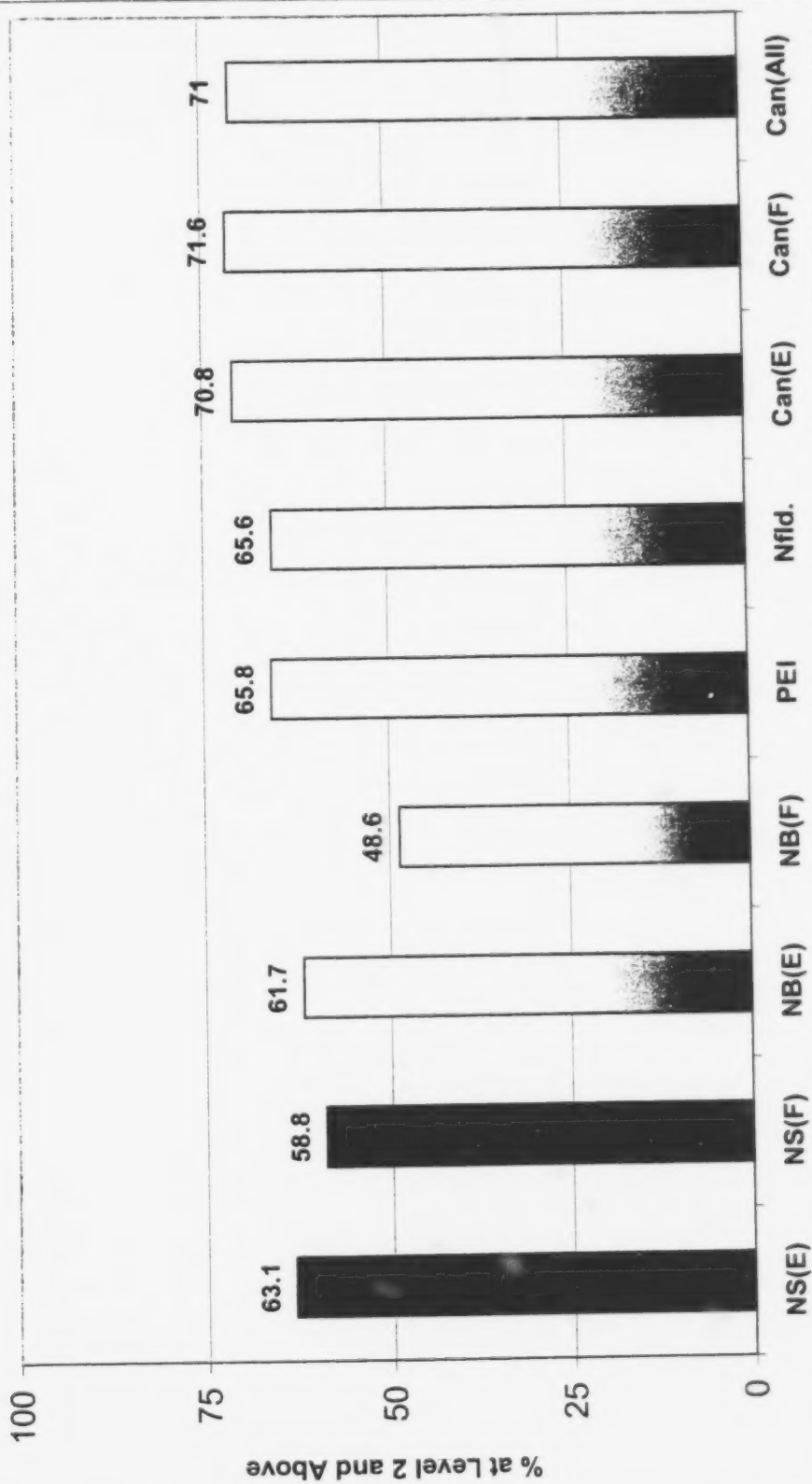
Nova Scotia (E) ranked 6th out of 13, Nova Scotia (F) ranked 9th out of 13



SAIP Writing Results for 16-Year-Olds  
 Nova Scotia (F) ranked 12th out of 12, Nova Scotia (E) ranked 9th out of 12



# SAIP Science 2004 - Atlantic 13-Year-Olds



SAIP Science Results for 16-Year-Olds  
 Nova Scotia (E) ranked 6th out of 13, Nova Scotia (F) ranked 9th out of 13



# SAIP Science Results

|      | 13-year-olds                                                                        | 16-year-olds                                                                        | 13-year-olds                                                                        | 16-year-olds                                                                      | 13-year-olds                                                                      | 16-year-olds                                                                      |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| ENG  |  |  |  |  |  |  |
| FREN |  |  |  |  |  |  |

## Legend



Above the Canadian mean



At the Canadian mean



Below the Canadian mean

# SAIP Science Results

| GROUP | 1996                                                                                |                                                                                     | 1999                                                                                |                                                                                   | 2004                                                                              |                                                                                   |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|       | 13-year-olds                                                                        | 16-year-olds                                                                        | 13-year-olds                                                                        | 16-year-olds                                                                      | 13-year-olds                                                                      | 16-year-olds                                                                      |
| ENG   |  |  |  |  |  |  |
| FREN  |  |  |  |  |  |  |

## Legend



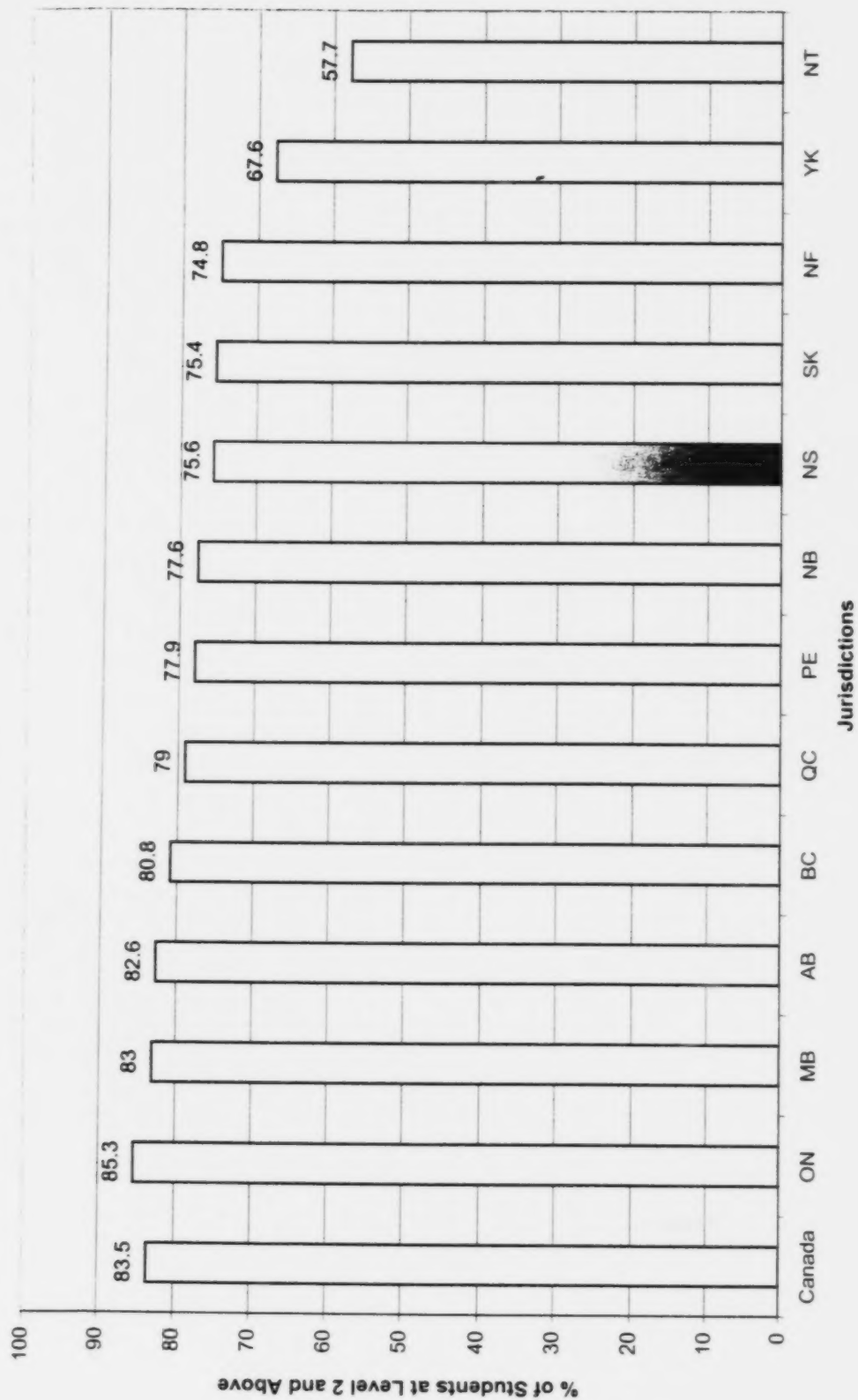
Above the Canadian mean

At the Canadian mean

Below the Canadian mean

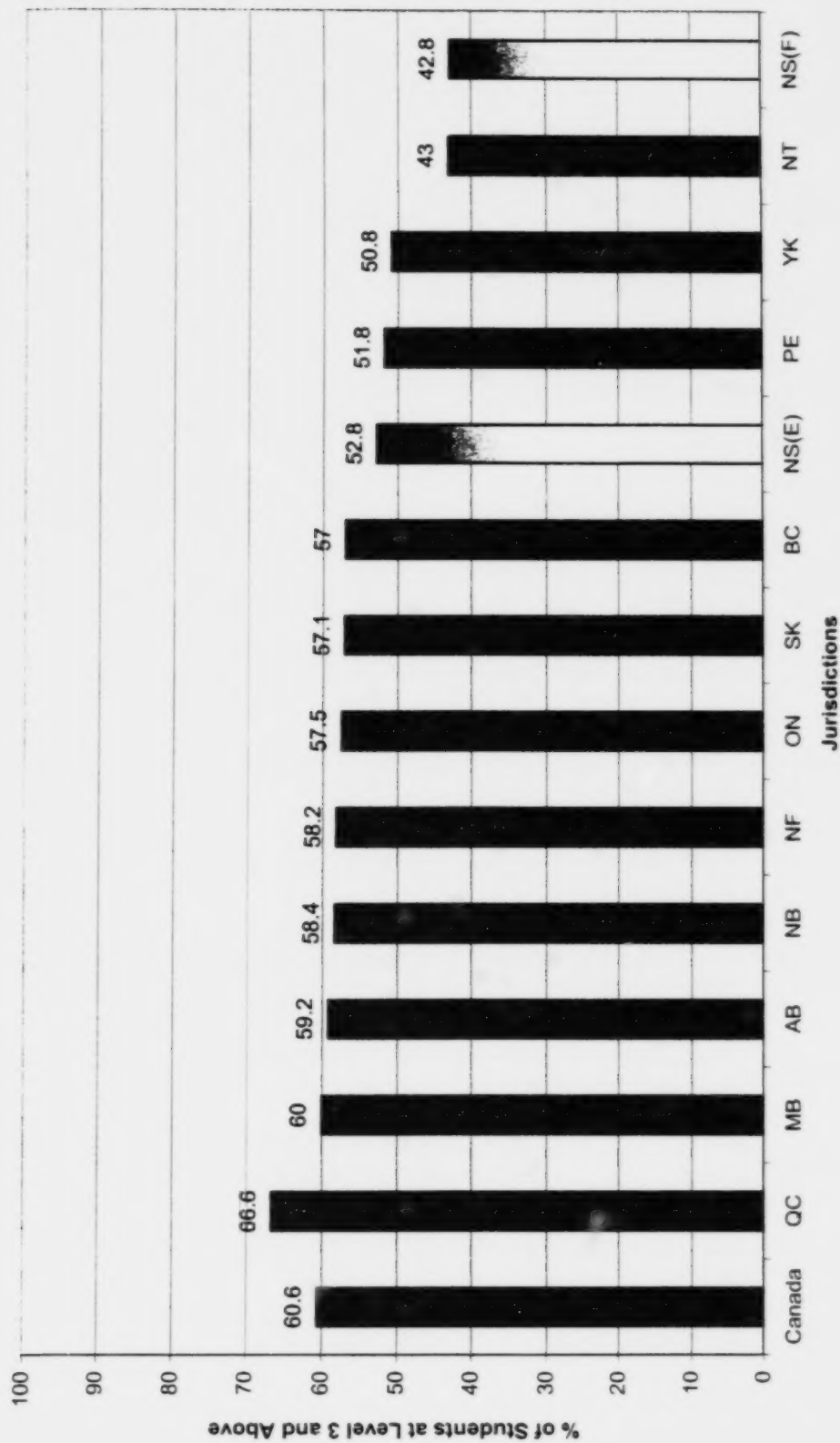


# SAIP Writing 2002 - 13-Year-Olds

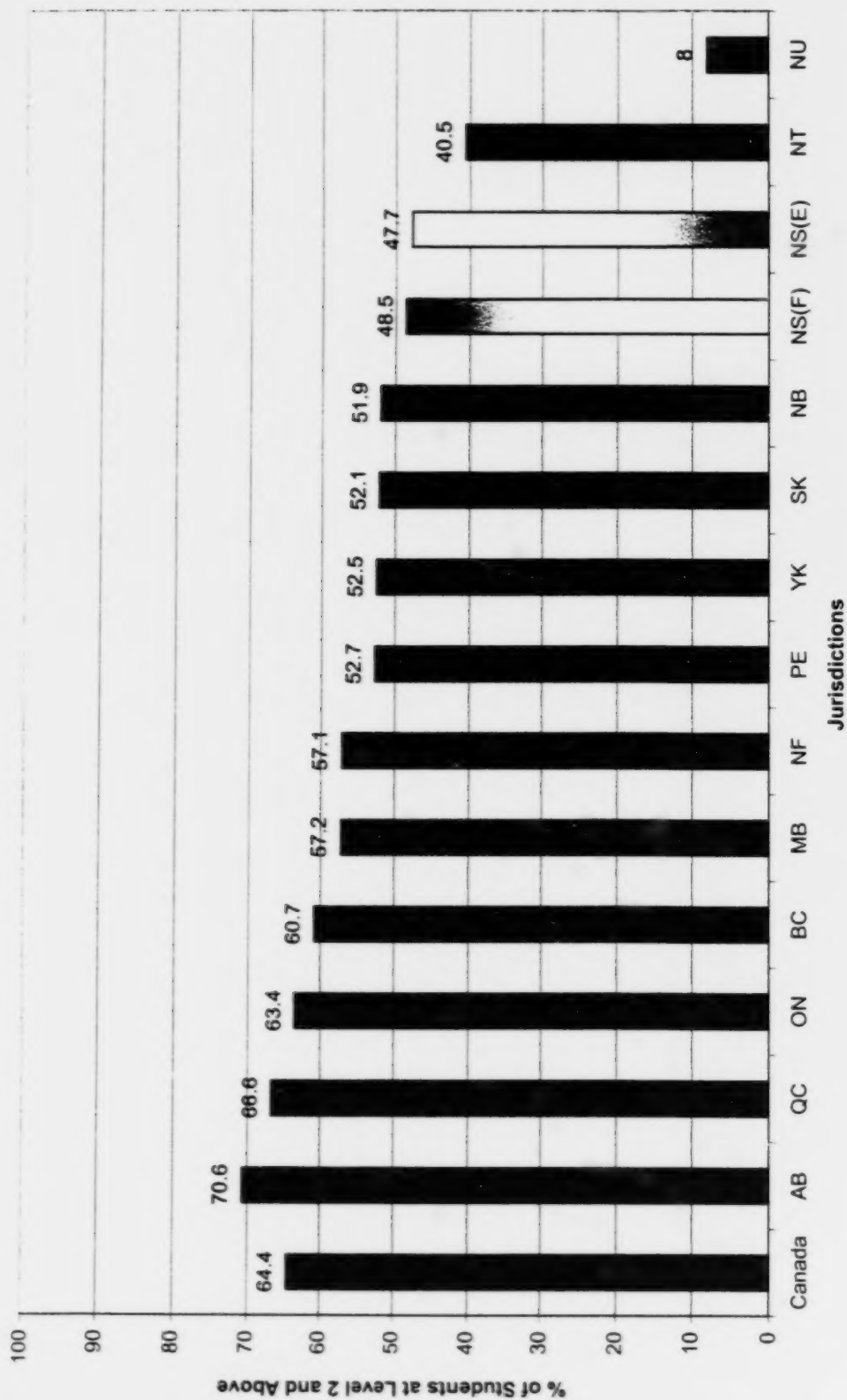


# SAIP Writing Results for 16-Year-Olds

Nova Scotia (F) ranked 12th out of 12, Nova Scotia (E) ranked 9th out of 12



# SAIP Math 2001 - 13-Year-Olds



# 13-Year-Olds - Problem Solving



SAIP Math Results for 16-Year-Olds - Math Content  
 Nova Scotia (F) ranked 2nd out of 12, Nova Scotia (E) ranked 7th out of 12



COUNCIL OF NOVA SCOTIA  
UNIVERSITY PRESIDENTS





# CRA OMNIBUS SURVEY

*A Quarterly Survey of Atlantic Canadians*

*Association of Atlantic Universities*

*First Quarter 2004  
Unpublished Results*

CORPORATE RESEARCH  
ASSOCIATES INC.





## Introduction

Corporate Research Associates Inc. (CRA) is pleased to present the Association of Atlantic Universities (AAU) with this Report and Tabular Results of commissioned questions from the First Quarter 2004 CRA *Atlantic Omnibus Survey*, Atlantic Canada's syndicated quarterly survey of public opinion and consumer trends.

This customized report presents key results and analysis from public opinion research conducted for AAU in February and March 2004. The sample parameters for the study are as follows:

| Survey Title                | Interview Dates              | Sample                                            | Margin of Error                           |
|-----------------------------|------------------------------|---------------------------------------------------|-------------------------------------------|
| CRA <i>Atlantic Omnibus</i> | February 18 to March 6, 2004 | 1503 Atlantic Canadian adults, 18 years and older | +/- 2.5 percentage points, 19 in 20 times |

CRA in consultation with AAU personnel designed the public research study with the following broad objectives:

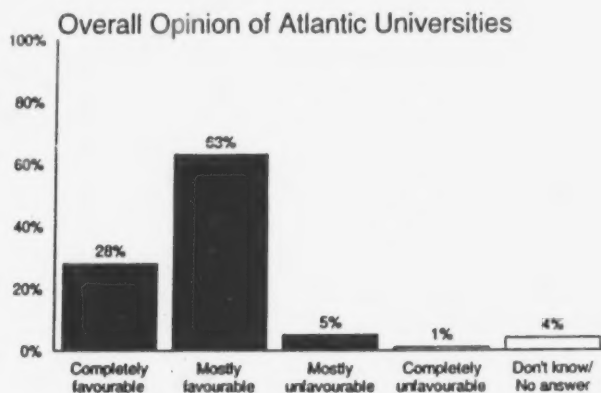
- Assess overall public opinion of Atlantic universities;
- Assess public perceptions of the role of Atlantic universities;
- Assess public perceptions of the contribution universities make to Atlantic Canada; and
- Evaluate the importance of university funding in light of other public policy issues.

Appended to this report are the survey questions (Appendix A) and a set of comprehensive banner tables (Appendix B) that present results for each question by key subgroups. Unless otherwise stated all figures in this report are expressed as a percentage.

## Overall Opinion of Atlantic Universities

The vast majority of Atlantic Canadians hold a favourable opinion of universities in the region.

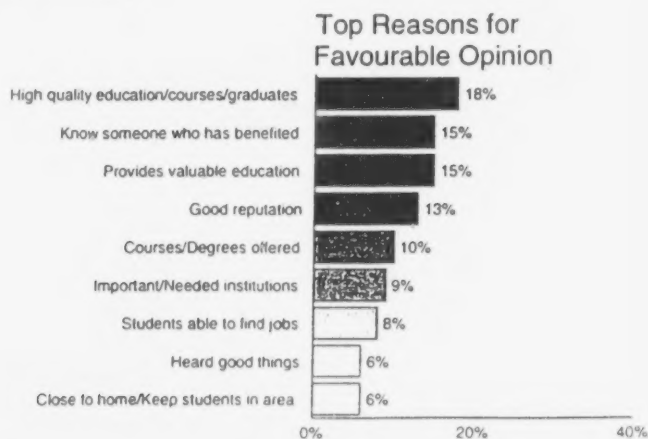
The majority of Atlantic Canadians are inclined to hold a mostly favourable opinion of Universities in the region, while a significant minority hold a completely favourable opinion. There is little variation in results across all population subgroups, including region and the presence of university students in the household. (Table BP3)



Q.BP3

The quality, reputation, and positive local impact of Atlantic universities are central themes behind favourable opinions of the region's post-secondary institutions.

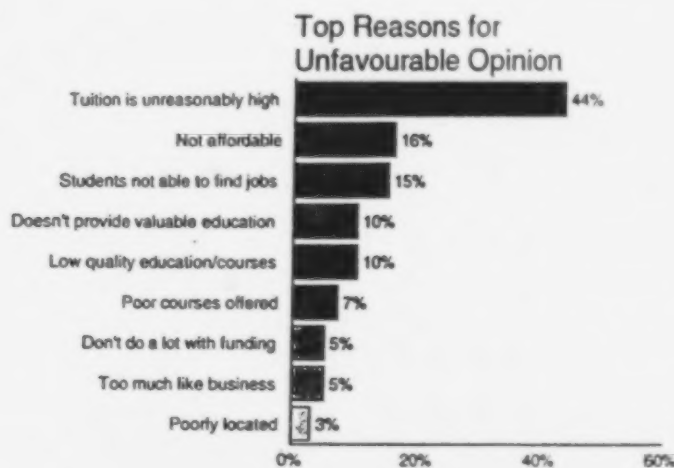
Reasons behind favourable opinions of Atlantic universities range from "high quality education" to "do a lot with limited funding" and all points in between, with no single reason being identified by more than two in ten Atlantic Canadians. However, the seemingly broad spectrum of reasons for favourable opinions can be reduced to three key areas, namely: the quality, reputation, and positive local impact of Atlantic universities. Results are generally consistent across population subgroups. (Table BP4a: Total Mentions)



Q.BP4a

The cost of education is clearly the main point of contention among those with an unfavourable opinion of Atlantic universities.

The small number of Atlantic Canadians with an unfavourable opinion of the region's universities ( $n = 85$ ) were asked why they were so negatively disposed. "Tuition is unreasonably high" or university is "not affordable" are the reasons for negative opinions given most often. Other reasons for negative opinions mentioned significantly less often include "students are not able to find jobs," "doesn't provide valuable education," and "low quality education." (Table BP4b: Total Mentions)

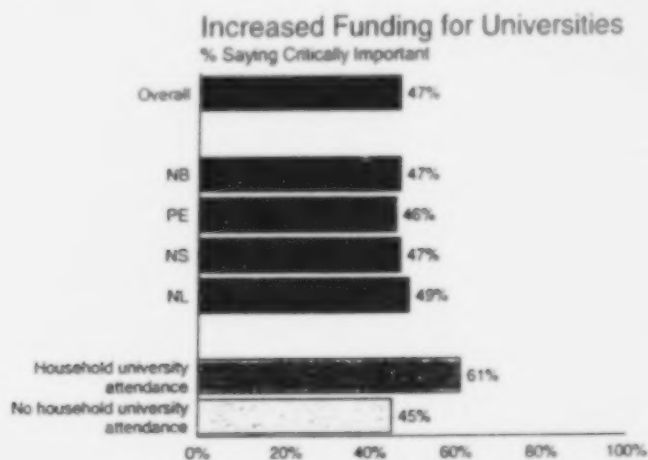


Q BP4b

Regionally, Nova Scotia residents are more likely than others to say that tuition is unreasonably high or not affordable, with three-quarters of respondents in that province mentioning these reasons. In comparison, New Brunswick residents are the least likely to mention the cost of education as a reason for holding an unfavourable opinion of Atlantic universities. Specifically, just three in ten residents of that province cite unreasonably high tuition. Moreover, New Brunswick residents are just as likely to mention low quality education or poor courses as reasons for holding unfavourable opinions of universities in the region as they are to mention the cost of education.

Support for increased funding for Atlantic universities is consistent across the region.

Throughout Atlantic Canada, residents generally agree on the importance of increased funding for universities, with close to one-half of residents in each province saying it is critically important. Moreover, a further four in ten residents of each province consider university funding to be an important, but not critical, priority for their provincial government. Less than one in ten say it is not an important funding issue. (Table BP2d)



Q.BP2d

Perhaps not surprisingly, households with a member who attends university are significantly more likely than others to assign critical importance to increased funding for universities.

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